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[redacted]

TOEROEK
ASSOCIATES, INC.

May 7, 2015

Mr. Mike Rudy
U.S. Environmental Protection Agency
Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

Re: Contract No. EP-BPA-11-W-0001
Task Order No. 069
Upper Animas Mining District
Mayflower Mill Final PRP Search Report

Dear Mr. Rudy,

On March 22, 2013, Toeroek Associates, Inc. (Toeroek) submitted to the U.S. Environmental Protection Agency (EPA) the Draft PRP Search Report for the Mayflower Mill Site under Contract No. EP-R8-09-10, Task Order No. 35. The Mayflower Mill Site is located in Upper Animas Mining District in San Juan County, Colorado (SSID No. 08-5M).

EPA has accepted the draft report, without edits, as the final product. Per your request, Toeroek is submitting this letter to document this acceptance.

If you have any questions, please do not hesitate to contact me at (720) 898-4105 or by email (lgarner@toeroek.com). We appreciate the opportunity to support EPA on this project.

Sincerely,

Lindsay Garner
Project Manager

cc: M. O'Reilly, EPA
TO-069 File

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UPPER ANIMAS MINING DISTRICT

MAYFLOWER MILL DRAFT PRP SEARCH REPORT

EPA SITE ID No. 08-5M

March 22, 2013

Enforcement Support Services 4
Contract Number EP-R8-09-10
TO No. 035

Enforcement Confidential

Prepared for:

U.S. Environmental Protection Agency
Region VIII
1595 Wynkoop Street
Denver, CO 80202-1129

Prepared by:

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TOEROEK
ASSOCIATES, INC.

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1.0 INTRODUCTION

On October 10, 2012 Toeroek Associates, Inc. (Toeroek) received Task Order (TO) No. 035, Amendment B, from the U.S. Environmental Protection Agency (EPA), Region 8, under Enforcement Support Services 4 Contract EP-R8-09-10. This TO requires Toeroek to conduct a potentially responsible party (PRP) search on the Mayflower Mill and Tailings Area (the "Site") in the Upper Animas Mining District. The Site is located two miles northeast of Silverton in San Juan County, Colorado.

1.1 OBJECTIVE AND SCOPE

The objective of this Task Order is to conduct a PRP search of the Site. This report identifies individuals and companies that may be liable for response actions and costs pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

The PRP Search includes a section on past and present owners and operators, and examines the areas of contamination delineated by the EPA Task Order Manager at the Task Order scoping meeting.

For the purposes of this report, the Site has been defined as Mayflower Mill, and its associated tailings impoundments. The Site covers approximately 130 acres and is located on the north side of the Animas River and County Road 2. Based on EPA direction, full chain of title was conducted for the core Mayflower Mill Property: "S" Mill Site, E.C.W. Mill Site, and H.M. Mill. Current ownership was researched for the remaining Site parcels.

1.2 REPORT FORMAT

The report is organized in six sections. Section 1.0 is the introduction and describes the objective, scope of work, format of the report, and sources of information. Section 2.0 describes the location of the Mayflower Mill and provides background information on the physical attributes of the area. Section 3.0 presents ownership information and the results of the title research. Section 4.0 provides the operational history of the Site. Section 5.0 identifies PRPs and associated parties for the Site, and provides current corporate status and addresses for these entities. Section 6.0 presents the conclusions and recommendations.

The report contains three appendices. Appendix A is a summary of the work performed under this TO and a list of the sources contacted. Appendix B is a reference document index of all supporting documents. Appendix C is an abstract of the title documents collected from the title search.

1.3 SOURCES OF INFORMATION

References to the numbered evidentiary documents within this report are made by a document number in parentheses following the sentence(s) to which the reference applies. The document number generally consists of a letter prefix followed by a number. The prefix indicates the general source of the document and the numbers are sequential. It should be noted that any documents obtained from the EPA Site Files are referenced according to their SDMS number.

The prefix in the citation number indicates the source of the document:

- AO# documents are from the Potentially Responsible Party Search Final Report for Mogul and Grand Mogul Mines Site, San Juan County, Colorado. The report was prepared for BLM by Prizim Inc. in June 2009.
- BLM documents are from the U.S. Bureau of Land Management.
- CBM documents are from the Colorado Bureau of Mines.
- CDPHE documents are from the Colorado Department of Public Health and Environment.
- COSOS documents are from the Colorado Secretary of State.
- CSA documents are from the Colorado State Archives.
- CSM documents are from the Arthur Lakes Library, Colorado School of Mines.
- DPL documents are from the Denver Public Library.
- DRMS documents are from the Colorado Division of Reclamation, Mining and Safety.
- DUPL documents are from the Durango Public Library.
- EMJ documents are from the Engineering and Mining Journal.
- EPA documents were provided by EPA.
- HAER documents are from the Historical American Engineering Record of the United States National Park Service.
- HISOS documents are from the Hawaii Secretary of State.
- INT documents are from online searches and pertain to corporate and private entities.
- MESOS documents are from the Maine Secretary of State.
- MY documents are from the *Mineral Resources* and *Minerals Yearbooks*, USGS publications.
- NEX documents are from LexisNexis news, corporate and legal database.
- NJSOS documents are from the New Jersey Secretary of State.
- PACER documents are from the Public Access to Court Electronic Records.
- SDMS documents are from the EPA Site File for the Iron Springs Mining District.
- SEC documents are from the United States Securities and Exchange Commission.
- SJCA documents are from the San Juan County Assessor's Office.
- TITLE documents are from the San Juan County Clerk and Recorder's Office.
- USGS documents are from the U.S. Geological Survey Library in Denver, Colorado.

2.0 SITE DESCRIPTION

Characteristics of the Site, including the Site Location (Section 2.1); Site Description (Section 2.2); Site Background (Section 2.3); Geology (Section 2.4); Ground and Surface Water (Section 2.5); Climate (Section2.6); and Contamination (Section 2.7) are presented in this section.

2.1 SITE LOCATION

The Mayflower Mill and Tailings Area, located in the Upper Animas Mining District, is situated approximately two miles northeast of Silverton in San Juan County, Colorado. The Site is located in the Upper Animas Mining District within Sections 9 and 10, Township 41 North, Range 7 West of the New Mexico Meridian. The Site is depicted in Figure 1 below.

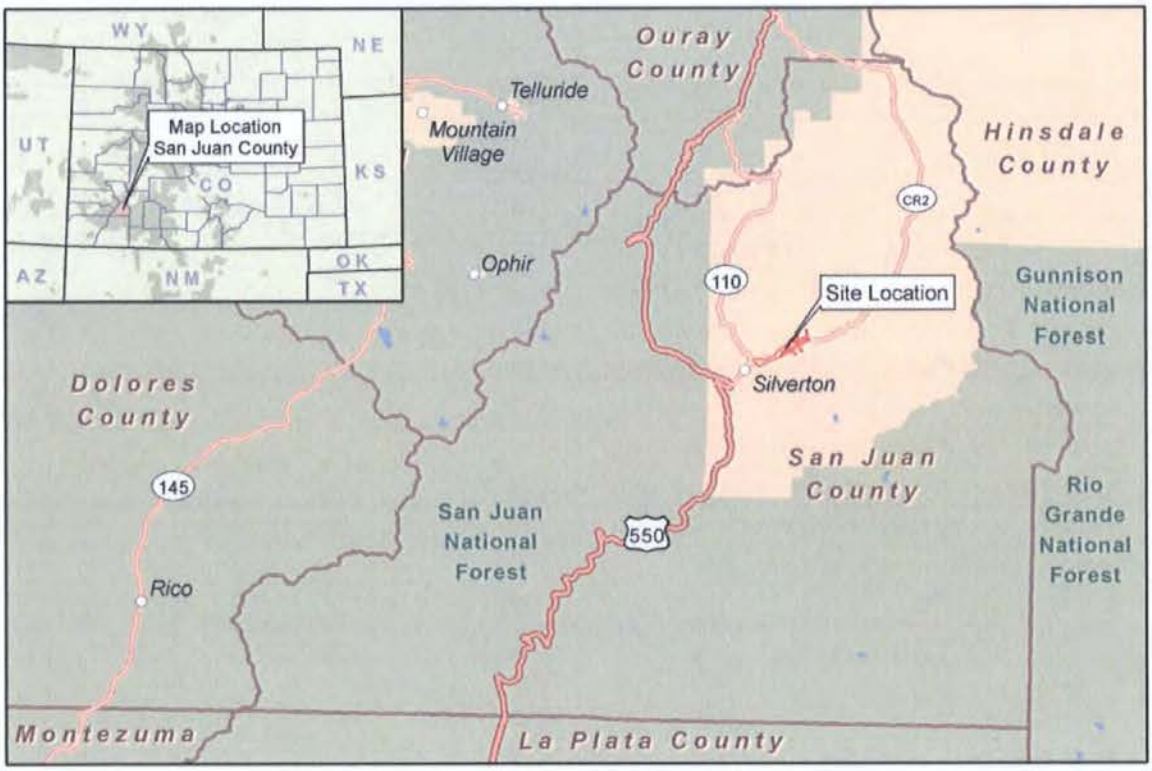

Figure 1: Site Location Map

This PRP Search Report addresses the Mayflower Mill and Tailings Area, which includes the parcels listed in Table 1.

Table 1: List of Site Mining Claims

Mining/Mill Claim Name	Mineral Survey (M.S.) Number
Mill Site Patented Claims	
"S" Mill Site	20407
E.C.W. Mill Site	20595
H.M. Mill Site	20595

Table 1: List of Site Mining Claims	
Mining/Mill Claim Name	**Mineral Survey (M.S.) Number**
Tailings Area Parcels	
Ann Harris Placer	11596
Aurora	18434
Bend Placer	11596
Blair Placer	841
Blair Placer	841
Blair Placer (portion)	841
Buena Vista	14012
C.H. Mill Site	20594 B
Tract A, Esther Allen	8801 A
Genoa, Lot 1	14024
Genoa, Lot 1	14024
Gold	14012
Jeannette Roux Placer	11596
Jeannette Roux Placer (Surface Rights Only)	11596
Jeannette Roux Placer, Lot 1 [Powerhouse PUD]	11596
Jeannette Roux Placer, Lot 2 [Powerhouse PUD]	11596
Jeannette Roux Placer, Lot 3 [Powerhouse PUD]	11596
Jeannette Roux Placer, Lot 4 [Powerhouse PUD]	11596
Jeannette Roux Placer, Lot 5 [Powerhouse PUD]	11596
Jeannette Roux Placer, Lot 6 [Powerhouse PUD]	11596
Jeannette Roux Placer, Lot 7 [Powerhouse PUD]	11596
Jeannette Roux Placer, Lot 8 [Powerhouse PUD]	11596
Jeannette Roux Placer, Lot 9 [Powerhouse PUD]	11596
Lowville Mill Site	5529 B
M.B. Mill Site	20595B
M.D. Thatcher Placer	17699
Marcia L.	8801 A
N.N. Mill Site	20595B
H.V.B. Mill Site	20594B
Peter Placer	11596
Polar Star Mill Site	7608
River	15112
Riverside	8801
Riverside (Part of)	8801
Riverside (Part of)	8801
Southside	14012
Tract A of Jeannette Roux Placer	8801 A
Tract A, T.H.W. Mill Site	20595B
Tract B, THW Mill Site	20595B
Tract B, Esther Allen	8801 A

Table 1: List of Site Mining Claims	
Mining/Mill Claim Name	**Mineral Survey (M.S.) Number**
U.S. C23981	Exempt
Valley Forge	653
Valley Forge Extension	18434

Figure 2: Mayflower Mill and Tailings Area Map

2.2 BACKGROUND INFORMATION

The Mayflower Mill is within the Site's boundaries and is a National Historical Landmark. The property is situated at an elevation of approximately 9,500 feet, two miles northeast of Silverton, Colorado. The mill consists of several buildings terraced into a hillside on the property. The main building is a gravity-flow metal flotation mill constructed of wood and structural steel with metal siding on portions of the walls. A large tram containing a metal cable with ore hauling buckets spans the canyon 10,000 feet from the tram house to the Mayflower mine-portal on the mountain opposite the mill. The wastes from the mill were sent to the Mayflower Mill tailings ponds. The tailings ponds were located just north of the Animas River, built along a steep hillside southwest of the Mayflower Mill (HAER-001, p. 6, 52-53).

There have been a total of four large tailings impoundments constructed over the course of the Site's history; hereinafter referenced as Tailings Pond No. 1, No. 2, No. 3, and No. 4 and are shown in Figure 2. Tailings Pond No. 1 and No. 2 were constructed shortly after the mill began operations in the early 1930s. Tailings Pond No. 3 and No. 4 were constructed in the mid-1970s, while Tailings Ponds No. 1 and No. 2 were discontinued and began reclamation. Tailings Pond No. 4 became the only waste impoundment after 1976, and continued to store Mayflower Mill tailings waste until operations stopped in 1991. Tailings Pond No. 4 remained a waste impoundment for other mines in the Sunnyside Mine complex that were undergoing reclamation, such as the American Tunnel and the Eureka Mine (CDPHE-20; DRMS-016, -026).

There have been numerous environmental studies conducted near the Sunnyside Mine Complex and the San Juan Mountains among various government agencies, private consultants, organizations, and corporate owners. The following sections provide excerpts from various studies that summarize Mayflower Mill's waste characteristics that have led to diminished water quality levels in the Animas River basin. Much of the background information was taken from United States Geological Survey (USGS) professional papers; and has been supplemented with information from the Colorado Department of Public Health and Environment (CDPHE) and the Colorado Division of Reclamation, Mining and Safety (DRMS).

2.3 GEOLOGY

The regional landscape of the western San Juan Mountains are rugged and steep, with terrain further emphasized by Pleistocene glaciation and Holocene erosion. Snowmelt is strongly controlled by slope and aspect of the sun's position, in addition to time of year and elevation. On steep north-facing slopes, snow remains even in the summer and fall months, following a winter with normal precipitation. In contrast, south-facing slopes that receive direct sunlight are usually snow free from late spring to early fall. Thus, the volume of acid rock drainage varies throughout the year, which in turn influences the amount of water-rock interaction (USGS-051, p. 6).

Bedrock is subject to strong mechanical weathering by exposure to frequent freeze-thaw temperature fluctuations, which in turn expose freshly broken surfaces to continued water-rock interaction. The western San Juan volcanic field is part of the Southern Rocky Mountain steppe eco-region. Only sparsely

vegetated alpine zone tundra is present at high elevation. Where altered bedrock and steep slopes coincide, the fragile vegetation patterns cannot stabilize the easily erodible outcrops, which constantly contribute mineral-laden sediment to streams below them. The subalpine zone is delimited by Engelmann spruce and subalpine fir. At lower elevations, riparian vegetation consists of grasses, sedges, mosses, and willows (USGS-051, p. 7).

Through the late Tertiary period to present day, regional uplift and subsequent erosion of the Colorado Plateau has cut deeply into the volcanic pile. Thousands of feet of overlying rock have been stripped away, revealing the roots of the volcanic center. Canyons around the margin of the Silverton caldera, such those cut by the Animas and Uncompahgre Rivers, have reached the underlying strata, exposing much older Paleozoic and Precambrian rock beneath the volcanic deposits (SDMS 1136211).

Extrusive sequences of volcanic ash-flow tuffs and flow breccias, and dacite-to-rhyodacite lava flows and domes underlie essentially the entire watershed. These rocks belong to the Silverton Volcanic series, and underlie the San Juan Formation. The Silverton series has been further subdivided into mapable formations in the Silverton Caldera. On the southern and eastern margins of the caldera, Paleozoic and older Precambrian rock are exposed beneath the volcanic flows. Intruded upward into the volcanic flows within the caldera, but particularly along its margins, are younger stocks, plugs, dikes, and sills of a variety of igneous rock (SDMS 1136211).

2.4 HYDROLOGY / HYDROGEOLOGY

The Animas watershed drains roughly three-quarters of the total extent of the Silverton Caldera. In Oligocene through Miocene time, the Silverton Caldera was a focus of repeated volcanic eruptive activity. Hundreds of cubic miles of ash flows and lava were erupted upon a surface of older Paleozoic and Mesozoic sedimentary rock, and Precambrian metamorphic and igneous basement rocks. Through the middle Tertiary, an extensive, thick volcanic complex was formed, encompassing the entire present Animas Basin watershed (SDMS 1136211).

The Silverton caldera is nested within the older San Juan caldera, and its collapse is evidenced by the intensely faulted and fractured ring fracture zone (see Figure 3), well exposed along the Mineral Creek Basin and east of Silverton along the Animas River. Pronounced erosion along Mineral Creek and along the Animas River upstream from Silverton accentuates the semicircular drainage system that follows the Silverton caldera ring fault zone (USGS-051, p. 20).

Shown in Figure 4, the Animas River flows south towards Silverton along the outer ring of depression in the Silverton caldera. The lower lying rock of the Animas River is tertiary intrusive volcanic rock, while erosional Quaternary sediments line the Animas River bed.

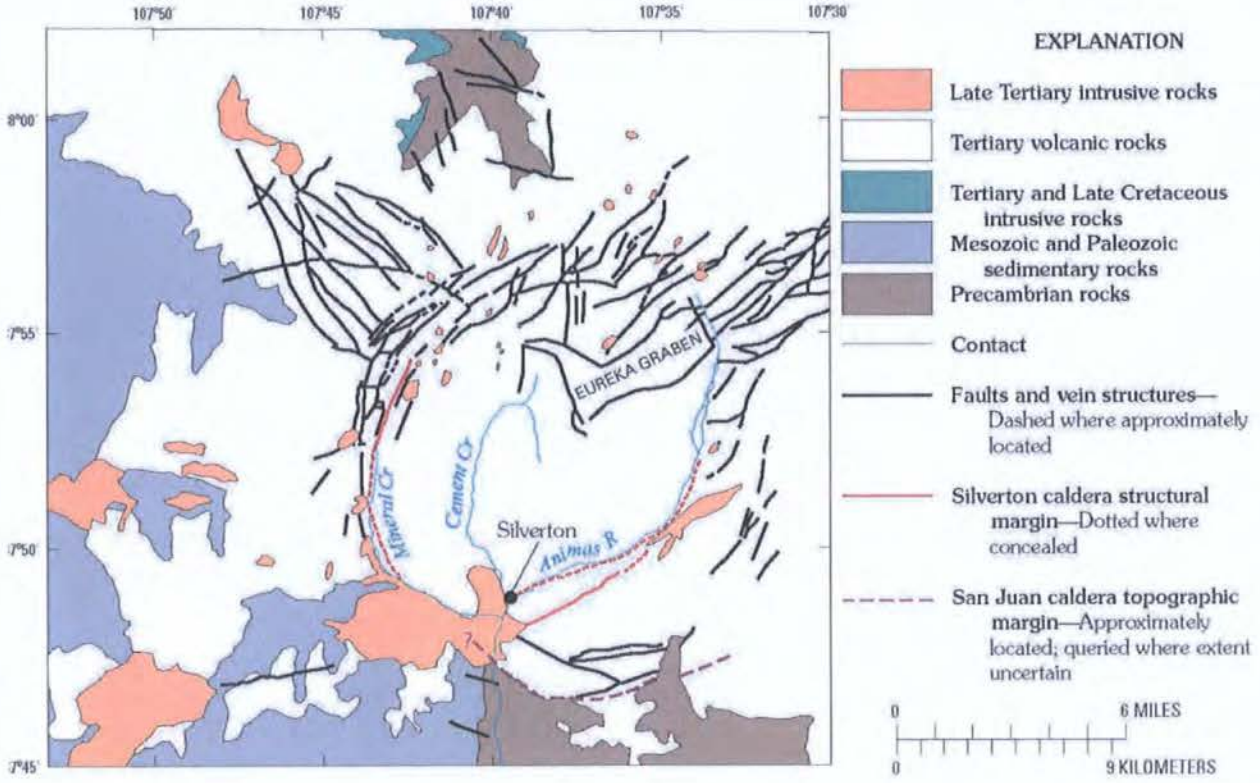

Figure 3: Generalized regional geology of the Animas River watershed and the Silverton Caldera fault zone (USGS-051)

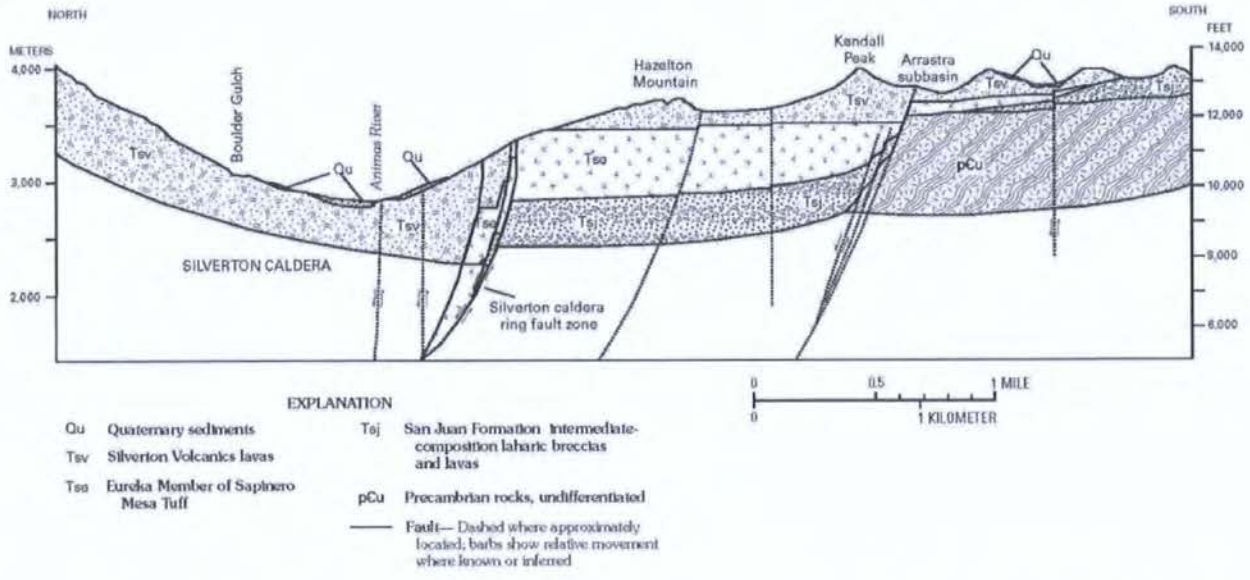

Figure 4: Generalized cross section of the Silverton Caldera fault zone and underlying geology of the Animas River basin (USGS-051)

The Mayflower Mill Site is situated along the north bank of the Animas River, and abuts a steep hillside to the north. The general hydrological flow of both groundwater and surface runoff traverses the Site, gravitating towards the Animas River depression. The following section addresses concerns about the general flow of groundwater and surface runoff seeping through the Mayflower Mill tailing impoundments.

2.5 WASTE CHARACTERISTICS AND SITE CONTAMINATION

Beginning in mid-1935, the initial operator of the Site, Shenandoah-Dives Mining Company (Shenandoah-Dives) began depositing mining waste into tailings ponds located southwest of the mill (HAER-001, p. 52). The Historic American Engineering Record report for the mill ("HAER report") described this disposal process:

> "The tailing slurry was pumped from the scavenger cells to the upper end of a V-shaped flume that delivered the tailings to the pond area. The flume was made of two 2" planks; one 12" wide, and the other 10" wide. Supported by a 20'-high trestle, it was set on a gradient so the tailings would flow downhill by gravity. Upon arrival at the pond, a 20'-long, grooved board distributed the tailings to form a 'wall of sand' in the shape of [*the*] pond. A technician would move the board periodically to retain a level top to the pond. In order to draw off, or decant, water without stirring up the sediment, a wooden box was laid in an inclined trench up the hillside prior to depositing the tailings...Once the desired level of water was attained, pipes drained off the water into a decantation pond, located on a lower plane than the tailings ponds, where it could evaporate. In practice, only a small portion of the water was actually decanted and evaporated. The greater volume percolated into the hillside. As each tailing pond filled to capacity, the flume was lengthened and another pond was begun" (HAER-001, p. 53).

Despite Shenandoah-Dives' relatively (and initially) "enlightened" approach to tailings disposal, the sand wall on Tailings Pond No. 1 was breached in 1947, and spilled a large quantity of waste into the Animas River (USGS-021, -054). The wall was repaired and operations were only briefly interrupted (USGS-021).

This occurred once again in 1975, when the main tailings pond washed out and discharged over 100,000 short tons of tailings and waste into Boulder Gulch and the Animas River (CSA-075; USGS-054). "Considerable cleanup" was required, and Standard Metals, the operator at the Site, received a $40,000 fine for the incident (CSA-075; USGS-054).

In 1976, an entirely new tailings disposal site and transport system was constructed and the old ponds were abandoned. Deposition of tailings were modified to a downstream technique, in which the cyclone separator moved along a designated centerline and the tailings slurry particles were segregated into coarse and fine fractions based on specific gravity. The coarse particles were deposited downstream of centerline, forming the tailings retention dam or embankment, and the tailings fines and slurry water

were deposited in sequence to the pond's interior or upstream of centerline.. This system was seen as an improvement and eliminated tailings slurry spills, which frequently occurred from the launder during transport. The tailings ponds are discussed in more detail in Section 4.0 (DRMS-026, p. 27-28).

A toe drain was also installed into Tailings Pond No. 4 to sustain overall stability of the tailings pond structure, maintaining phreatic levels in the berm at a minimum. The toe drain was constructed with in-place river gravels, overlain by a pervious filter cloth to keep the gravels from plugging (DRMS-025).

The CDPHE was concerned that tailings waste water from the impoundments were seeping into ground water and the adjacent Animas River. The CDPHE requested that Standard Metals perform tests on the Site to confirm or disprove such occurrences. Studies conducted by Standard Metals in 1982 revealed that seepage from Tailings Pond No. 4 had occurred along the embankment by three factors: high phreatic levels in the berm; migration of pond water through the roadbed at the northeast abutment of the tailings pond with the roadbed; and infiltration of the Animas River into the toe drain during periods of high run-off. Standard Metals attempted to mitigate seepage from the embankment with a series of plans for seepage controls (DRMS-025, -026).

In July 1982, seepage from the toe drain averaged 100 gallons per minute (gpm), but after new installations, the flow from the toe drain was reduced to 10 to 20 gpm (DRMS-029, -030). CDPHE commented on the stability of the tailings impoundment berm after these measures:

> "The corrective measures instituted by [the operator] will control some of this seepage, but probably not eliminate it. Because of the alluvium underlying the pond, it would be reasonable to assume that some ground water flow exists between the pond and the river, this situation may also exist with the blanket drain. The only way to potentially eliminate seepage would be to line the pond or construct a grout-type cutoff curtain and corresponding pump-back system. However, both such measures may be impractical at this site" (DRMS-031).

The tailings ponds were constructed as a hillside impoundment in an alluvial valley where the Animas River travels southwest to Silverton. The hillside contact is glacial till, and up-gradient of this contact area are alluvial fans resulting from cliff erosion. Snowmelt and rainfall that is not lost to evaporation or plant transpiration become surface runoff, or infiltrate to flow as groundwater to the streams in the valley floor (DRMS-025). Before measures to control water runoff from higher on the hillside [known as the Upland Groundwater Diversion project] seepage and water drainage passing through tailings impoundments was observed, especially during times of high groundwater seasons. Water from higher on the hillside was picking up dissolved metals as it migrated to the lower depressions of the Animas River watershed (CDPHE-025).

The following list names reagents formerly used at the Mayflower Mill, which are currently a concern for stormwater pollution: sodium cyanide; zinc sulfate; sodium sulfate; liquid promotor (unknown composition); sodium ethyl xanthate; potassium amyl xanthate; dowfroth frother; polypropylene glycol

methyl ether; lime; copper sulfate; tergitol (nonionic surfactant); calcium hypochlorite; cationic coagulant; anionic flocculent; sodium hydroxide; sodium gluconate; lead nitrate. Other potential pollutants in the tailings ponds that could come in contact with stormwater runoff are residual metals, such as aluminum, cadmium, copper, lead, zinc, iron and manganese (CDPHE-023).

3.0 OWNERSHIP HISTORY

In line with the Statement of Work, Toeroek contacted a local attorney to research chain-of-title for the Mayflower Mill Site at the San Juan County Clerk and Recorder's Office. EPA requested that Toeroek complete full chain of title, from patent to present, for the following three patented Mayflower Mill Site claims. These claims are the core mill site properties.

- **"S" Mill Site**
- **E.C.W. Mill Site.**
- **H.M. Mill Site**

Toeroek was also tasked to identify current ownership for the Mayflower Mill Site tailings impoundment area that was associated with the Mayflower Mill. Listed in Table 2 is the current owner information for the patented Mill Site claims and all associated tailings impoundment area parcels.

Section 3.1 provides general information on the current property owner(s) for the Mayflower Mill Site claims and the Mayflower Mill tailings impoundment area properties. Section 3.2 presents a detailed discussion of the title search results for the core Mayflower Mill Site claims from patent to present. Several of the tailings impoundment mining claims share a similar ownership history as the core properties. Following the ownership discussion of the core Mayflower Mill Site parcels, is a table which depicts historic ownership information for the tailings impoundment parcels that are mentioned within those deeds. Title abstracts for the three patented Mayflower Mill Site claims, along with additional title research and current ownership information for the tailing impoundments, are presented in tabular form in Appendix C.

3.1 CURRENT OWNERS

The current property owners of the Site are listed in Table 02 below. Additionally, Figure 05 following this Table depicts the Site property and the current owners. The tailings impoundment area extends north of the Site onto public land, which is owned by the U.S. Bureau of Land Management (BLM).

Table 2: Current Owners of Site Property

Claim Name	S.N. #	Parcel #	Current Owner	Deed	SJCA
Mayflower Mill Site Current Owners					
"S" Mill Site	20407	48290090010010	San Juan County Historical Society	TITLE-023	SJCA-029
E.C.W. Mill Site	20595	48290090010010	San Juan County Historical Society	TITLE-023	SJCA-029
H.M. Mill Site	20595	48290090010010	San Juan County Historical Society	TITLE-023	SJCA-029
Mayflower Mill and Tailings Area Current Owners					
Ann Harris Placer	11596	48290090010003	Sunnyside Gold Corporation	TITLE-015	SJCA-001

Table 2: Current Owners of Site Property					
Claim Name	**S.N. #**	**Parcel #**	**Current Owner**	**Deed**	**SJCA**
Aurora	18434	48290100010053	San Juan County Historical Society	TITLE-027	SJCA-025
Bend Placer	11596	48290090010031	Perino, Larry R.	TITLE-033	SJCA-014
Blair Placer	841	48290090010003	Sunnyside Gold Corporation	TITLE-015	SJCA-001
Blair Placer	841	48290090010003	San Miguel Power Association	TITLE-029	SJCA-001
Blair Placer (portion)	841	48290090010321	San Juan County	N/A	SJCA-003
Buena Vista	14012	48290100010006	Sunnyside Gold Corporation	TITLE-015	SJCA-020
C.H. Mill Site	20594 B	48290090010031	Perino, Larry R.	TITLE-033	SJCA-014
Tract A, Esther Allen	8801 A	48290090010034	Dan Dugi Defined Benefit Trust	TITLE-034	SJCA-016
Genoa, Lot 1	14024	48290100010055	Zastrow, Larry	TITLE-038	SJCA-021
Genoa, Lot 1	14024	48290100010056	Zastrow, Larry	TITLE-038	SJCA-022
Gold	14012	48290090010003	Sunnyside Gold Corporation	TITLE-015	SJCA-001
Jeannette Roux Placer	11596	48290090010003	Sunnyside Gold Corporation	TITLE-015	SJCA-001
Jeannette Roux Placer (Surface Rights Only)	11596	48290000010070	Utah Power & Light Co.	TITLE-025	SJCA-004
Jeannette Roux Placer, Lot 1 [Powerhouse PUD]	11596	48290090010101	Dillon Ranches LLLP	TITLE-064	SJCA-005
Jeannette Roux Placer, Lot 2 [Powerhouse PUD]	11596	48290090010102	San Juan County Historical Society	TITLE-015	SJCA-006
Jeannette Roux Placer, Lot 3 [Powerhouse PUD]	11596	48290090010103	Michael K. Meuer	TITLE-061	SJCA-007
Jeannette Roux Placer, Lot 4 [Powerhouse PUD]	11596	48290090010104	Sidehill Mugwump Protection Society	n/a	SJCA-008
Jeannette Roux Placer, Lot 5 [Powerhouse PUD]	11596	48290090010105	Little Dog Enterprises, LLC	TITLE-059	SJCA-009
Jeannette Roux Placer, Lot 6 [Powerhouse PUD]	11596	48290090010106	San Juan County Historical Society	TITLE-068	SJCA-010
Jeannette Roux Placer, Lot 7 [Powerhouse PUD]	11596	48290090010107	San Juan County Historical Society	TITLE-015	SJCA-011
Jeannette Roux Placer, Lot 8	11596	48290090010108	San Juan County Historical Society	TITLE-015	SJCA-012

Table 2: Current Owners of Site Property					
Claim Name	**S.N. #**	**Parcel #**	**Current Owner**	**Deed**	**SJCA**
[Powerhouse PUD]					
Jeannette Roux Placer, Lot 9 [Powerhouse PUD]	11596	48290090010109	San Juan County Historical Society	TITLE-015	SJCA-013
Lowville Mill Site	5529 B	48290100010048	Watts Rev Declaration of Trust	TITLE-041	SJCA-028
M.B. Mill Site	20595B	48290100010006	Sunnyside Gold Corporation	TITLE-015	SJCA-020
M.D. Thatcher Placer	17699	48290090010031	Perino, Larry R.	TITLE-033	SJCA-014
Marcia L.	8801 A	48290100010047	Naffziger, Ryan and Cherie	TITLE-045	SJCA-018
N.N. Mill Site	20595B	48290100010006	Sunnyside Gold Corporation	TITLE-015	SJCA-020
H.V.B Mill Site	20594B	48290090010003	Sunnyside Gold Corporation	TITLE-015	SJCA-001
Peter Placer	11596	48290090010031	Perino, Larry R.	TITLE-033	SJCA-014
Polar Star Mill Site	7608	48290090010031	Perino, Larry R.	TITLE-033	SJCA-014
River	15112	48290090010035	Dan Dugi Defined Benefit Trust	TITLE-035	SJCA-017
Riverside	8801	48290090010003	Sunnyside Gold Corporation	TITLE-015	SJCA-001
Riverside (Part of)	8801	48290090010008	William E. Ogle	TITLE-043	SJCA-026
Riverside (Part of)	8801	48290090010008	William E. Ogle	TITLE-044	SJCA-026
Southside	14012	48290100010009	Edgar, Tim A. and Pam Killebrew	TITLE-019	SJCA-019
Tract A of Jeannette Roux Placer	8801 A	48290090010110	San Juan County Historical Society	TITLE-032	SJCA-027
Tract A, T.H.W. Mill Site	20595B	48290100010006	Sunnyside Gold Corporation	TITLE-015	SJCA-020
Tract B, T.H.W Mill Site	20595B	48290100010006	Sunnyside Gold Corporation	TITLE-015	SJCA-020
Tract B, Esther Allen	8801 A	48290090010111	San Juan County Historical Society	TITLE-032	SJCA-015
U.S. C23981[1]	-	-	-	-	-
Valley Forge	653	48290100010053	San Juan County Historical Society	TITLE-027	SJCA-025
Valley Forge Extension	18434	48290100010053	San Juan County Historical Society	TITLE-027	SJCA-025

[1] Although this property is shown on the Assessor's Plat Map, limited information about this parcel is available at the San Juan County Clerk and Recorder's Office. This parcel is exempt and appears to be owned by the federal government.

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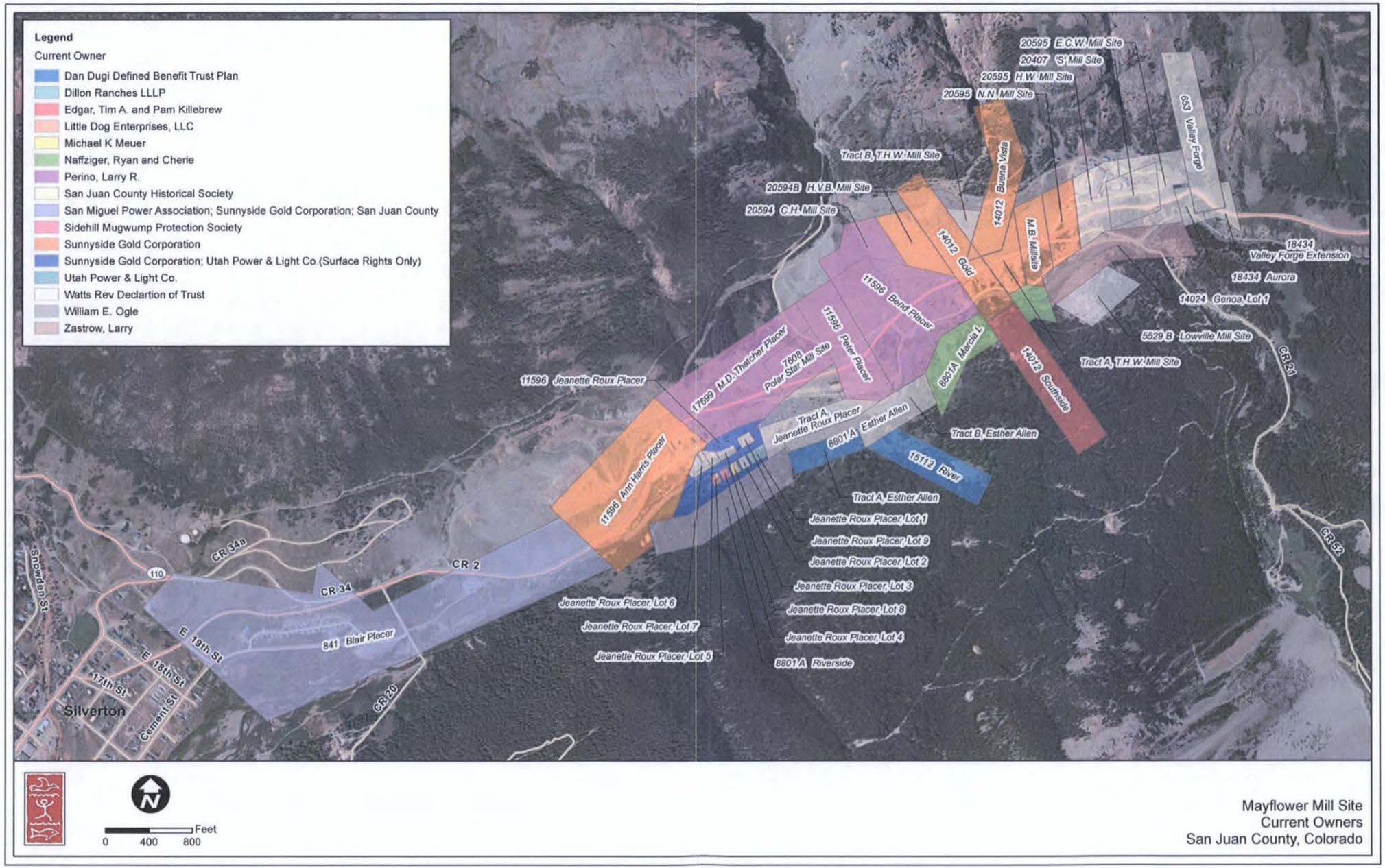

Figure 5: Current Owner Map

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3.2 TITLE RESEARCH RESULTS

This section presents the ownership history of the Mayflower Mill Site claims, **"S" Mill Site, E.C.W Mill Site,** and **H.M. Mill Site,** from patent to present. The following chain of title is presented and organized based on ownership time-periods for the Mayflower Mill Site. Because the Mayflower Mill Site claims are conveyed together from patent to present, the claims are discussed in one historical narrative.

Additionally, several of the tailings impoundments parcels share similar ownership history as the Mill Site parcels. Toeroek has extracted and presented this information following the subsequent narrative in a table. The title research results are presented in tabular form in Appendix C.

Shenandoah Dives Mining Co. (1931 – 1957)

- On August 14, 1931, the United States of America granted the "S" Mill Site (Survey No. 20407) patented claim to the Shenandoah-Dives Mining Company (TITLE-001).
- On March 7, 1946, the United States of America granted the E.C.W. Mill Site and H.M. Mill Site (Survey No. 20595) patented claims to the Shenandoah-Dives Mining Company (TITLE-002).
- On July 11, 1957, Shenandoah-Dives Mining Company merged with and into the Marcy Exploration and Mining Company, Inc. (survivor). The surviving corporate name was changed to Marcy-Shenandoah Corporation (TITLE-003).
- On September 3, 1957, the Shenandoah-Dives Mining Company conveyed the "S" Mill Site, E.C.W. Mill Site, and H.M. Mill Site by Quit Claim deed to the Marcy-Shenandoah Corporation (TITLE-004).

Marcy-Shenandoah Corporation (1957 – 1959)

- On February 28, 1959, the Marcy-Shenandoah Corporation conveyed an undivided one-half (½) interest in the "S" Mill Site, E.C.W. Mill Site, and H.M. Mill Site by Quit Claim deed to the Standard Uranium Corporation (TITLE-006).

  On the same day, Marcy-Shenandoah Corporation and Standard Uranium Corporation each conveyed its undivided ½ interest in the "S" Mill Site, E.C.W. Mill Site, and H.M. Mill Site by Quit Claim deed to Shenandoah, Ltd. (TITLE-007).

  Shenandoah, Ltd. was a limited partnership between Standard Uranium Corporation (general partner) and Marcy-Shenandoah Corporation, and became the sole owner of the Mayflower Mill Site claims.

Shenandoah, Ltd. (1959 – 1960)

- On January 18, 1960, the Shenandoah, Ltd. partnership was dissolved between Standard Uranium Corporation and Marcy-Shenandoah Corporation (TITLE-008).

A gap in title exists between the ownership of Shenandoah, Ltd. and Standard Metals Corporation (Standard Metals). The following information was identified that helps to reconcile this gap:

By Assignment dated January 18, 1960, Standard Uranium Corporation acquired all of the interest of the Marcy-Shenandoah Corporation in Shenandoah, Ltd. (TITLE-071). In addition, a Standard Uranium Corporation Annual Report reported that on "December 30, 1959, the Corporation [Standard Uranium Corporation] offered to purchase the remaining one-half interest of the limited partner [Marcy-Shenandoah Corporation] for $515,000. This offer was accepted on January 18, 1960 and the purchase has been reflected herein as of December 31, 1959" (A01-0165).

It is assumed that Standard Uranium Corporation became the sole owner of the "S" Mill Site, E.C.W. Mill Site, and H.M. Mill Site, along with all other associated Mayflower Mill claims, by way of this transaction; however, no title conveyance records from Shenandoah, Ltd. to Standard Uranium Corporation was discovered through title research.

On May 4, 1960, Standard Uranium Corporation changed its name to Standard Metals Corporation (Standard Metals) (TITLE-071).

Standard Metals Corporation (1960 – 1985)

- On November 19, 1985, Canadian Imperial Bank of Commerce (CIBC) (mortgagee) released and terminated its mortgage with Standard Metals (mortgagor) (TITLE-014).
- Standard Metals, being a debtor in possession pursuant to a reorganization proceeding before the United States Bankruptcy Court for the District of Colorado, and Echo Bay Inc., a Delaware corporation, entered into an Asset Sale and Purchase Agreement on November 19, 1985, for the purchase and sale of substantially all of the assets of Standard Metals located within San Juan County, Colorado, and having been approved by the United States Bankruptcy Court for the District of Colorado (TITLE-016).
- On the same day, Echo Bay Inc. assigned and transferred all its rights, titles and interests, which included the "S" Mill Site, E.C.W. Mill Site, and H.M. Mill Site, to assets stated in the November 19, 1985 Asset Sale and Purchase Agreement between Standard Metals and Echo Bay Inc. to Sunnyside Gold Corporation (SGC) (TITLE-015).

Sunnyside Gold Corporation (1985 – 1996)

- By way of General Transfer, Assignment and Bill of Sale, Standard Metals assigned and transferred all its rights, titles and interests that were located in San Juan County, Colorado to SGC. All Mayflower Mill and tailings area interests held by Standard Metals, which included patented claims "S" Mill Site, E.C.W. Mill Site, and H.M. Mill Site, were conveyed to SGC on November 19, 1985 (TITLE-015).

San Juan County Historical Society (1996 – Present)

- On May 29, 1996, SGC conveyed the "S" Mill Site, E.C.W. Mill Site, and H.M. Mill Site by Quit Claim deed to the San Juan County Historical Society (SJCHS) (TITLE-023). This conveyance was the last transfer of ownership for the Mayflower Mill Site. **SJCHS is the current owner of the "S" Mill Site, E.C.W. Mill Site, and H.M. Mill Site.**
- September 15, 1998, SJCHS granted right of access to the E.C.W. Mill Site claim for the purpose of hydrological studies, pursuant to the 1996 Consent Decree between the state of Colorado and SGC. The right of access was deemed necessary by SGC to intercept and divert water before it reached the tailings mine waste and tailings materials (also known as the Upland Hydrological Control project) (TITLE-026).
- On January 14, 1999, SJCHS granted right of access to the E.C.W. Mill Site claim and portions of the adjacent Valley Forge, Valley Forge Extension and Aurora claim properties for the purpose of hydrological studies, pursuant to the 1996 Consent Decree between the state of Colorado and SGC. The right of access was deemed necessary by SGC to intercept and divert water before it reached the tailings mine waste and tailings materials (also known as the Upland Hydrological Control project) (TITLE-028).
- On October 11, 2006, SJCHS granted an easement situated in portions of the Jeannette Roux Placer and Esther Allen claims to The Board of County Commissioners of the County of San Juan for the purpose of constructing and maintaining a pedestrian hiking/biking trail. The Board of County Commissioners indemnified SJCHS of any claims for damages on the easement property (TITLE-048).
- On October 11, 2006, SJCHS dedicated an open space within the Powerhouse Project Property (portions of the Jeannette Roux Placer and Esther Allen claims) to The Board of County Commissioners of the County of San Juan for public purposes and to maintain the scenic beauty and historical significance of the property (TITLE-049).
- Recorded on January 17, 2007, SJCHS terminated a lease agreement with SGC for all lawful uses in connection with the ownership, operation and reclamation of its mining properties located in San Juan County, Colorado (TITLE-050).

Several of the Mayflower Mill tailings impoundment parcels were identified within the chain-of-title research for the "S" Mill Site, E.C.W. Mill Site, and H.M. Mill Site. As title research for the tailings impoundment parcels only consisted of current owner research, the common historic ownership information pertinent to these parcels has been compiled and summarized in the table below.

The following company abbreviations are used in the table:

- SDMC = Shenandoah Dives Mining Company
- MSC = Marcy-Shenandoah Corporation
- SLTD = Shenandoah, Ltd.
- SMC = Standard Metals Corporation
- SGC = Sunnyside Gold Corporation
- SJCHS = San Juan County Historical Society

Table 3: Timeline of past owners for Mayflower Mill tailing impoundment areas

Tailings Area Parcels	1946 – 1957	1957 – 1959	1959 – 1985	1985 – 1996	1996 – Present
N.N. Mill Site	**SDMC** (TITLE-002)	**MSC** (TITLE-004)	**SLTD/SMC** (TITLE-006, -007) (A01-0165)	**SGC** (TITLE-015)	
M.B. Mill Site	**SDMC** (TITLE-002)	**MSC** (TITLE-004)	**SLTD/SMC** (TITLE-006, -007) (A01-0165)	**SGC** (TITLE-015)	
T.H.W. Mill Site Tract "A"	**SDMC** (TITLE-002)	**MSC** (TITLE-004)	**SLTD/SMC** (TITLE-006, -007) (A01-0165)	**SGC** (TITLE-015)	
T.H.W. Mill Site Tract "B"	**SDMC** (TITLE-002)	**MSC** (TITLE-004)	**SLTD/SMC** (TITLE-006, -007) (A01-0165)	**SGC** (TITLE-015)	
C.H. Mill Site		**MSC** (TITLE-004)	**SLTD/SMC** (TITLE-006, -007) (A01-0165)	**SGC** (TITLE-015)	
Buena Vista		**MSC** (TITLE-004)	**SLTD/SMC** (TITLE-006, -007) (A01-0165)	**SGC** (TITLE-015)	
Gold		**MSC** (TITLE-004)	**SLTD/SMC** (TITLE-006, -007) (A01-0165)	**SGC** (TITLE-015)	
Bend Placer		**MSC** (TITLE-004)	**SLTD/SMC** (TITLE-006, -007) (A01-0165)	**SGC** (TITLE-015)	
Peter Placer		**MSC** (TITLE-004)	**SLTD/SMC** (TITLE-006, -007) (A01-0165)	**SGC** (TITLE-015)	
H.V.B Mill Site		**MSC**	**SLTD/SMC**	**SGC**	

Table 3: Timeline of past owners for Mayflower Mill tailing impoundment areas					
Tailings Area Parcels	**1946 – 1957**	**1957 – 1959**	**1959 – 1985**	**1985 – 1996**	**1996 – Present**
		(TITLE-004)	(TITLE-006, -007) (A01-0165)	(TITLE-015)	
Polar Star Mill Site				**SGC** (TITLE-015)	
Esther Allen Tract B				**SGC** (TITLE-015)	**SJCHS** (portion) (TITLE-023)
Jeannette Roux Placer				**SGC** (TITLE-015)	**SJCHS** (portion) (TITLE-023)
M.D. Thatcher Placer				**SGC** (TITLE-015)	
Riverside (partial)				**SGC** (TITLE-015)	
Blair Placer				**SGC** (TITLE-015)	**SJCHS** (portion) (TITLE-023)

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4.0 OPERATIONAL HISTORY

This section describes the operational history of the Site and surrounding area. A general description of the Mayflower Mill history and operations is presented in Section 4.1; operational and mill process and production information is detailed in Section 4.2; and Section 4.3 describes the regulatory history at the mill.

4.1 INTRODUCTION

The Mayflower Mill is one of the best intact examples of a twentieth-century flotation mill in existence today, and is of great historical importance to mining history and the heritage of Silverton, San Juan County and the State of Colorado (INT-003, -004). It was built in 1929, and operated from 1930 until its permanent closure in 1991. During this 61-year span of operations, the mill remained in operation for all but 12 years (INT-014). The mill was owned and operated by several different entities, as presented in Table 4.

The mill originally received ore from the Shenandoah-Dives Mining Company's Mayflower Mine, to which it was connected via an extensive tramway. By the 1960s, when the mill was operated by the Standard Metals Corporation, it received a steady supply of ore from the Sunnyside Mine, the most important mine in the San Juan County area. Over its many years of operation, the mill also received and processed custom ore from other area mines, but the vast majority of ore processed was supplied by the Mayflower and Sunnyside.

The mill processed these ores into various zinc, lead, copper, gold and silver concentrates, and discharged significant amounts of waste rock and tailings into the Animas River and tailings ponds at the mill facility. Although the mill was innovative and ahead of its time by utilizing tailings ponds since the 1930s, tailings discharge and disposal has left behind significant contamination.

The Mayflower Mill was permanently shut down in 1991. It is estimated that over its 61-year span of operations, the mill processed 9,700,500 tons of ore and produced 1,940,100 ounces of gold and 30,000,000 ounces of silver (INT-014). The mill was conveyed to the San Juan County Historical Society in 1996, which sought to preserve the mill for its historical value. Rehabilitation of the negative impacts of mill operations on the surrounding area has been ongoing from the 1960s to present.

Table 4: Mayflower Mill Owner/Operator Timeline

Dates of Operation	Corporate Owners/Operators	Operations
1929 – 1957	Shenandoah-Dives Mining Company	Constructed mill in 1929 and operated mill, processing ore and producing concentrates from 1930 until a temporary closure in 1953. Obtained patent to the mill site in 1931.
1957 – 1959	Marcy-Shenandoah Corporation	Took title to the mill and performed work to refurbish and renovate the facility, although the mill was mostly inactive during this period.
1959 – 1960	Shenandoah, Ltd.	Took title to the mill and continued work to

Table 4: Mayflower Mill Owner/Operator Timeline		
Dates of Operation	**Corporate Owners/Operators**	**Operations**
		refurbish and renovate the facility, although the mill was mostly inactive during this period.
1961 – 1985	Standard Metals Corporation	Processed ore and produced concentrates; renovated and improved mill; and remediated disturbed areas.
1985 – 1996	Sunnyside Gold Corporation	Processed ore and produced concentrates; renovated and improved mill; and remediated disturbed areas.
1996 – Present	San Juan County Historical Society	Worked to preserve mill for its historical significance and began operation of the mill as a cultural and historical landmark. Is the current owner of the mill.

4.2 Mayflower Mill Operations

Section 4.2 is organized into eight distinct time periods, based primarily upon ownership of the mill. These periods are discussed in detail below.

- Pre-Mayflower Mill Operations (pre-1929)
- Mayflower Mill Construction (1929)
- Shenandoah-Dives Mining Company Operations (1929 – 1957)
- Marcy-Shenandoah Corporation Operations (1957 – 1959)
- Shenandoah, Ltd. Operations (1959 – 1960)
- Standard Metals Corporation Operations (1960 – 1985)
- Sunnyside Gold Corporation Operations (1985 – 1996)
- San Juan County Historical Society Ownership (1996 – Present)

Pre-Mayflower Mill (pre-1929)

A group of Kansas City individuals known as the Shenandoah-Dives Syndicate organized in January 1926 (USGS-043). The syndicate purchased and operated the Shenandoah-Dives, Mayflower and North Star groups of mining claims (CSA-001, -002, -004, -008). These individuals later officially organized and incorporated the Shenandoah-Dives Mining Company ("Shenandoah-Dives") in May 1929 (A08-0006, -0007; USGS-043).

Prior to the construction of the company's new mill in 1929, Shenandoah-Dives originally processed its ore at the Iowa Tiger mill, which was a 100-ton concentration and flotation mill (CSA-001, -004). In 1929, 28,858 tons of ore were milled at the Iowa Tiger mill (CSA-004). The company then planned to erect a new 500-ton mill and construct an aerial tramway from the Shenandoah-Dives mine to the mill (CSA-002).

Mayflower Mill Construction (1929)

Construction began on the new mill in 1929. The State of Colorado Bureau of Mines (CBM) Inspection Report issued May 28th, 1929 provided details on the construction:

> "A contract has been let by THE SHENANDOAH-DIVES MINING CO. to THE STEARNS-ROGER MFG. Co., of Denver, for the erection and equipment of a 600 ton concentration and flotation mill.
>
> This mill will be situated on MILLSITE S, 2.1 miles northeasterly from Silverton, about ¼ of a mile northeasterly from the mouth of Boulder Gulch, and about 100 feet distant from the northerly side of the county highway from Silverton to Eureka.
>
> The dimensions of the Mill section are 210' x 80':
> The dimensions of the Shops section are 60' x 30':
> The dimensions of the Warehouse are not yet decided:
> The dimensions of the Offices are not yet decided:
> Steel Ore Bins will be built above the Mill.
>
> The mill structure will be erected so as to provide ample space for machinery and equipment for a capacity of 600 tons daily, and it is the plan of the company to install equipment for such tonnage capacity, expecting as to Ball Mills, Tables and Flotation which at first will be provided for the treatment of 300 tons daily.
>
> EXCAVATION AND CONCRETE MASONRY for the mill has been sublet by The Stearns-Roger Mfg. Co. to Hamilton & Gleason Co., contractors for work of this character: President, G. W. Hamilton; Secretary, C. B. Berry, addresses of both 505 Tramway Bldg, Denver, Colo.; Vice President, R. J. Gleason, in direct charge of work, whose address is Silverton, Colo." (CSA-005).

The mill was built into the mountainside to utilize gravitational flow (HAER-001, p. 36). Figure 6 shows the mill in 1929, shortly before it was completed.

Figure 6: Mayflower Mill, 1929 (DPL-003)

Shenandoah-Dives Mining Company Operations (1929-1957)

The mill began operations in February 1930 (MY-1929). The CBM's December 7, 1929 inspection report described the operation of the new mill:

> "THE SHENANDOAH-DIVES MINING COMPANY have [*sic*] recently completed its concentration and flotation MILL. The structure is 210 feet long by 135 feet wide at front and 80 feet wide at rear end. Ample space has been provided for the installation of additional machinery and equipment sufficient for the treatment of 600 tons of ore daily. At present the mill is arranged for treating 300 tons daily" (CSA-004).
>
> "The flow sheet of this mill is as follows: The ore is crushed at the mine and transported to the mill tram terminal where it is dumped into a steel hopper, thence taken by belt conveyor 250 feet long by 2 feet wide to a round steel ore bin of 1500 tons capacity; thence by 24" pan conveyor to 8' by 6' ball mill, and a small trammel at end of said ball mill, the undersize going through a distributor to 3 Wilfley tables, and the oversize going by elevator to a 12' x 26' Dorr classifier, and the oversize from classifier returned to the ball mill. The finished overflow goes to a 20 cell Minerals Separation flotation machine; the tailings from the 3 tables goes back to the 12' x 26' classifier; the concentrates from the 3 tables go to a dewatering device; the tailings from the first 20 cell flotation

machine goes to another Min. Sep. flotation machine of 20 cells for the elimination of the iron content, thence to a 15 foot Dorr bowl classifier: The tailings from this bowl classifier conveyed by 6 – 2 in. Wilfley pumps to a concrete Dorr thickener 50 feet in diameter and about 6 feet high, where the water is filtered and returned to the mill: The coarse product from the bowl classifier goes to 2 Wilfley tables, and the tailings are sent back to the 50' concrete thickener. The copper concentrate from the first 20 cell flotation machine goes to a stave tank Dorr thickener 35 feet in diameter, and the concentrates from this 35 foot thickener goes to a 5' x 10' Dorr filter, thence to an 18' x 18' x 12' concrete concentrate bin. The iron concentrate from the 2nd. Flotation machine (21 in) goes to another stave tank Dorr thickener – 35' in dia., and then concentrate from this thickener to a dewatering machine, thence to a regrind by a 4' x 10' ball mill, and thence to a Wilfley table: The tailings from this table are returned to the flotation machine, thereafter to be handled as deemed advisable, probably sent to a grinding pan. All secondary froth from both flotation machines is returned by 6 – 2 in. Wilfley pumps to said machines. The overflow of the bowl classifier is sent through a 5 in. iron pipe line to the 50 foot concrete Dorr thickener by a 3 in. Wilfley tailings pump. Also installed is a 10 cell – 12 inch Mineral Separation machine for picking up iron concentrate and product of reagents.

Other machinery and equipment installed consists of a 1 Gen. Elec. rotary blower, No. 15112; 1 – 17x10 Chicago-Pneumatic Vacuum pump; several reagents feeders; 1 – 55 KW Gen. Elec. turbine and generator; 4 – 3 h.p., 50 – 5 h.p., 3 – 7.5 h.p., 2 – 15 h.p., 4 – 25 h.p., 1 – 250 h.p. Gen'l Electric motors; 1 – 1- ton Armington crane; 1 – 150 h.p. horizontal tubular boiler for heating purposes, and starting compensators for motors, all new equipment.

In the section of the mill used as a machine shop is 1 South Bend lathe with 24" swing and 12' bed; 1 portable Gen. Elec. Arc welder; 1 Smith & Mills shaper; 2 drill press, pipe threaders, cutters, and machine tools. The welder, shaper and lathe are operated by 3 – 3 h.p. Gen. Elec. motors. Also 1 Yale & Towne crawl trolley, all new.

ELECTRICITY: Equipment and apparatus consists of 3 – 250 KVA Gen. Elec. transformers of outdoor type on elevated steel structural support which is fenced and gate kept locked. Lightning arresters, transmission switches, and a full complement of appliances are provided in conformity with specifications and installation by the General Electric Company. All electric switches in the mill are enclosed in closets, and all wiring is in closed pipe conduit, thus preventing dangerous contact by persons. The transformers are set up about 100 feet northeasterly from the mill" (CSA-004).

Ore was delivered to the mill via a 10,594-ft. tramway running from the Shenandoah-Dives mine to the mill terminal (HAER-001, p. 40). The tramline began operating in January 1930 (HAER-001, p. 38). Two

sizes of buckets were initially used, one with a capacity of one ton, and the other with a capacity of 1,600 pounds (HAER-001, p. 40). A primary crusher operated at the mine entrance, which roughly crushed the ore to ½ inch pieces before it was loaded into the tram buckets and sent down to the mill (HAER-001, p. 43).

From 1929 through the 1940s, ore concentrates were shipped by truck to Silverton, where they were transferred and shipped via rail to the American Smelting & Refining Company smelter in Leadville, Colorado (CSA-003, -012, -017, -019, -20; HAER-001).

Despite a downward trend in base-metal prices, the mill continued to be profitable in 1931 and 1932, and was one of the few mills in the United States to continue operations throughout the Great Depression (EMJ-002, -003). A new Symons 4-foot short head crusher was installed at the mill in 1933 (CSA-013). The mill's General Manager, Charles A. Chase described the mill operations in a 1935 article for the Engineering and Mining Journal:

> "Bulk flotation is practiced, some pyrite and sphalerite being depressed and wasted. The mill was designed for 300 tons daily; but, with lowering grade of ore and lowering prices of metals, capacity was increased progressively to 600 tons, this final capacity being assured by the interpolation of a 4-ft Symons short-head crusher operating wet at the ball mill.
>
> Metallurgical results held uniformly good as tonnage mounted, extractions at 600 tons being 91.1 per cent for gold, 83.9 for silver, 87.5 for lead, and 88.2 for copper, compared with 90.8 per cent for gold, 84.2 for silver, 86.2 for lead, and 89.5 for copper at 300 tons" (EMJ-004).

Charles A. Chase was one of the pioneers in the use of tailings or holdings ponds to contain waste rock (INT-004). In the first years of the mill's operation, tailings were discharged directly into the Animas River (HAER-001, p. 52). After researching more environmentally-sound methods of tailings disposal, Mr. Chase adapted and implemented a new tailing-pond method, which was in use in Butte, Montana (HAER-001, p. 52). Beginning in mid-1935, Shenandoah-Dives began depositing waste into tailings ponds located south of the mill (HAER-001, p. 52). The Historic American Engineering Record report for the mill ("HAER report") described this disposal process:

> "The tailing slurry was pumped from the scavenger cells to the upper end of a V-shaped flume that delivered the tailings to the pond area. The flume was made of two 2" planks; one 12" wide, and the other 10" wide. Supported by a 20'-high trestle, it was set on a gradient so the tailings would flow downhill by gravity. Upon arrival at the pond, a 20'-long, grooved board distributed the tailings to form a 'wall of sand' in the shape of [*the*] pond. A technician would move the board periodically to retain a level top to the pond. In order to draw off, or decant, water without stirring up the sediment, a wooden

box was laid in an inclined trench up the hillside prior to depositing the tailings. The top of this box had a series of holes 1 ½" in diameter. As the water level rose, the lower hole was corked off to elevate the water level. As each subsequent hole was reached, a cork was placed in that hole. Once the desired level of water was attained, pipes drained off the water into a decantation pond, located on a lower plane than the tailings ponds, where it could evaporate. In practice, only a small portion of the water was actually decanted and evaporated. The greater volume percolated into the hillside. As each tailing pond filled to capacity, the flume was lengthened and another pond was begun. At the Shenandoah-Dives Mill, the ponds filled a triangular shape, following the mill's property lines" (HAER-001, p. 53).

A photograph, circa 1934-1939, provides a view of the Mayflower Mill, Animas River and Railroad looking in a westerly direction (see Figure 7).

Figure 7: Photo of Mayflower Mill, Animas River and Railroad, circa 1934 – 1939 (DPL-001)

A new custom ore sampling plant was constructed at the facility in 1936, and a small addition was made to the mill building in 1937 to house a new 6x5-foot Stearns Roger ball mill (CSA-018, -20, -021; HAER-001, p. 54). The custom ore plant allowed the mill to begin accepting custom ores from other area mines (HAER-001, p. 54). By 1938, several other changes and improvements were made to the mill. The CBM inspector's report dated January 6, 1939 described these changes and their effect on mill operations:

> "MILLING PLANT consists of a 750 ton flotation plant, equipped with crushers, ball mills, classifier, flotation machines, tables, settling tanks, filters, pump elevators, etc., as well as a modern automatic sampling plant. Besides milling their own ore, they are milling various amounts of custom ores. Owing to winter conditions only a small amount of custom ores is treated at this time. Additional equipment added to the mill the past two years makes it possible to ship a 50% zinc concentrate to Amarillo, Texas, a copper product to El Paso, Texas, and two lead products to the Leadville Smelter. They are milling between 700 and 750 tons per day.
>
> A new tailings disposal plant has been constructed the past year and is operating satisfactorily.
>
> BUILDINGS at the mill include lower tram terminal, office building, assay office, sampling plant, transformer houses, ore bins, etc." (CSA-022).

These improvements in the late-1930s made it possible for the mill to produce a selective lead-copper and zinc concentrate instead of the bulk lead-copper-iron concentrate originally produced (HAER-001, p. 54). Zinc concentrate was shipped to Amarillo, Texas, copper product to El Paso, Texas, and lead product to Leadville (CSA-026, -028, -035).

An avalanche destroyed towers one through five of the aerial tramway in 1938 (HAER-001, p. 42). An avalanche diverter was constructed above tower one following this event, to protect the tram against future destruction and subsequent interruption in operation (HAER-001, p. 42).

In 1939, the mill was shut down for weeks because of a labor strike by Silverton Miners Union-CIO, Local #26 (INT-004). In response to the passage of the "Wages-Hours" Act, Shenandoah-Dives decreased wages in order to offset the new overtime costs (INT-004). After a bitter strike and brawl, the miner's union was dissolved and the strike was broken (INT-004).

Sampling plant bins were added for custom ore shippers in 1940 (CSA-027). The company's 1940 annual report described the mill operations at that time:

> "The rise in cost of mill operation from $.837 in 1936, $.868 in 1937, $.971 in 1938, $.989 in 1939, to $1.038 in 1940 has behind it a story of fine metallurgical work by the supervisory staff of the mill as striking as the story of the completion of the essential big

> works at the mine. Prior to late 1937 concentration in the mill was simple one-stage 'bulk flotation'; zinc went with lead and iron to the lead smelter and, when above 8% of the concentrate, imposed severe penalties in added selling costs, $.067 in 1934, $.061 in 1935 (a total of $14,716 penalty was charged against 39,499 tons of custom ore in years 1935-37 inclusive). By persistent study selective concentration has been developed: 42.5% of the bulk concentrate is rejected as too low-grade to justify shipment, the lead-copper-iron concentrate to lead smelter is higher grade, a high grade zinc is sold, sellers of custom ore are freed from zinc penalties. The ground-work of the new practice was built up progressively prior to 1940, reaching a high level in time to care for the great increase of zinc in that year. The net gain on the year through the development was $146,959: so this fine work made possible the company's survival, surmounting high cost" (USGS-015).

In 1943, a new 6-cell Fagergren Flotation Machine was added to the mill (CSA-029, -033). This replaced the old "M.S. Flotation Machine," and made it possible to produce a higher value copper product by rejecting more of the iron pyrite (CSA-029, -033). This excess iron was then sent to the tailings pond (CSA-029). Two Denver 4-cell flotation machines were added in 1944 (CSA-032).

Despite Shenandoah-Dives' relatively (and initially) "enlightened" approach to tailings disposal, the sand wall on Tailings Pond No. 1 was breached in 1947, and spilled a large quantity of waste into the Animas River (USGS-021; USGS-054, p. 38). The wall was repaired and operations were only briefly interrupted (USGS-021).

Following World War II, the federal government's investment in road construction resulted in a "vastly improved" Highway 550 (HAER-001, p. 58). This allowed concentrates to be shipped directly to the smelters by truck, bypassing the railroad entirely (HAER-001, p. 58).

Throughout Shenandoah-Dives' operation of the mill, ore from the Shenandoah-Dives mine was by far the greatest source of ore for the mill (CSA-038, -039; HAER-001, p. 43). Though custom ore was financially important because of the narrow profit margins of mill operation, the amounts of custom ore processed were small when compared with the large percentage of ore coming from Shenandoah-Dives operations. Amounts of custom ore milled are listed in Table 5 when available.

A Standard Metals report from the 1980s described the tailings disposal process during the Shenandoah-Dives operation of the mill:

> "During the Mayflower Mill operating period, from 1930 to 1953, two tailing impoundments, identified as Pond No. 1 and Pond No. 2, were constructed employing a gravity launder and decant system. Tailings slurry was pumped from the mill into wooden launders set on a downhill grade, following the disposal site perimeter. The slurry was then discharged from the launders and onto the disposal site perimeter

through spigots placed at regular intervals in the launder. Variation in specific gravities of slurry particles being deposited first, forming the tailings retention dam or berm. The smaller particles and slurry water were then deposited in sequence toward the pond interior. Decant towers were constructed at locations farthest from tailings slurry entry points, and were used to decant clarified water from the pond interior, allowing maintenance of specified berm free board as the impoundment increased in height. By 1953, tailings disposal practices conducted on impoundments Nos. 1 and 2 had affected approximately 50 acres at the Mayflower Mill site" (DRMS-026).

The mill was shut down on March 14, 1953, due to depressed metal market prices (CBM-1953; CSA-047; DRMS-026; MY-1953). Other than a brief reopening in 1958, the mill remained closed from this time until it was put back in operation in 1960 (CBM-1953, -1954, -1955, -1958; HAER-001, p. 59).

From 1930 to 1939, the mill processed 1,824,678 tons of ore and produced concentrates worth $9,104,343.63 (USGS-032). From 1940 to 1949, it processed 1,763,265 tons of ore and produced concentrates worth approximately $11,362,581 (USGS-032). From 1950, until the mill was shutdown in early 1953, it processed 581,425 tons of ore and produced concentrates worth over $5,243,925[2] (USGS-032).[3]

Table 5: Mill Operational Data from 1930 to 1953

Year	Ore Processed (tons)	Concentrates Produced (tons)[4]	Custom Ore Treated (tons)	Ratio of Reduction (tons ore to tons concentrates)	Capacity (tons daily)	Source
1930	100,141	5,714		17.5 to 1	300 (actual) 600 (capable)	CSA-008; USGS-014
1931	170,795	8,041		21.24 to 1	500 (actual)	CSA-009; USGS-014
1932	190,890	9,670		19.7 to 1	500 (actual)	CSA-011; USGS-014
1933	198,549	9,020		22.0 to 1	600	CSA-013; USGS-015
1934	209,703	8,120		25.9 to 1	600	CSA-015; USGS-015
1935	167,521	5,728		29.2 to 1	600	CSA-016; USGS-015
1936	180,822	7,332		24.7 to 1	600	CSA-018; USGS-015
1937	199,958	7,036		28.4 to 1	600 – 700	CSA-021; USGS-015
1938	211,293	7,121		29.7 to 1	700 – 750	CSA-023; USGS-015
1939	195,006	5,722		34.08 to 1	700 – 750	CSA-025; USGS-015
1940	212,891	8,154	8,910	26.1 to 1	700 – 750	CSA-027; USGS-015
1941	231,519	6,648	4,639	34.8 to 1	700	CSA-030; USGS-016

[2] Dollar amount does not include the value of concentrates produced in 1953.
[3] All dollar amounts provided in this paragraph are taken from reports prepared in 1952 and have not been adjusted for inflation.
[4] Estimated figures were generated by multiplying the days of mill operation by the tons of concentrates produced per day figures provided by Shenandoah-Dives operational reports. These numbers were only used where no actual figure was provided. Estimated figures are followed by "(est.)."

Table 5: Mill Operational Data from 1930 to 1953						
Year	Ore Processed (tons)	Concentrates Produced (tons)[4]	Custom Ore Treated (tons)	Ratio of Reduction (tons ore to tons concentrates)	Capacity (tons daily)	Source
1942	168,772	4,194	2,920	40.2 to 1	700 – 750	CSA-034; USGS-017
1943	156,763	3,676	2,462	42.6 to 1	700	CSA-033; USGS-018
1944	142,635	3,752		38.0 to 1	700	CSA-032; USGS-019
1945	152,084	4,208 (est.)	504			USGS-019, -025, -032
1946	175,121	5,171	3,844		700	CSA-031, -038; USGS-020, -032
1947	172,125	3,597 (est.)	10,210			USGS-021, -032
1948	165,283	3,317	17,509	49.83 to 1	700	CSA-041; USGS-022
1949	186,072	4061 (est.)	15,259			USGS-023, -032
1950	202,947	5,508	4,530			USGS-024, -025, -032
1951	196,097	6,528 (est.)	26,118			USGS-025, -032
1952	149,804	6,423 (est.)	37,500			CSA-048; MY-1952; USGS-032
1953	32,577					MY-1953

Marcy-Shenandoah Corporation Operations (1957 – 1959)

Marcy-Shenandoah Corporation was formed in July 1957 by the merger of Shenandoah-Dives and Marcy Exploration and Mining Company, Inc. (TITLE-003). Marcy Exploration and Mining Company, Inc. was the surviving entity of the merger, and through the merger changed its name to Marcy-Shenandoah Corporation ("Marcy-Shenandoah") (TITLE-003). On September 3, 1957, Shenandoah-Dives conveyed the mill property to Marcy-Shenandoah via Quitclaim Deed (TITLE-004).

The mill continued to be idle during the time of Marcy-Shenandoah's ownership. The company worked to renovate and refurbish the mill during this time, but there is no evidence that the mill produced any ore concentrates (CBM-1957, -1958; CSA-054; MY-1957, -1958, -1959). No CBM reports for the mill were located for the years 1956 and 1957. The CBM's 1958 report contained the following description of the mill facility, as of October 1958:

> "Considerable time was spent in 1958 in reactivating mill to process crude ore. Some ore was run through the sampling plant but no concentrate was made. At present no men are employed at mill except a watchman and time keeper" (CSA-054).

Shenandoah, Ltd. Operations (1959 – 1960)

Standard Uranium Corporation (Standard Uranium) began to negotiate with Marcy-Shenandoah to acquire the company's base metal properties in San Juan County, including the Mayflower Mill, in 1958 (A01-0165). These negotiations resulted in the two entities forming the Shenandoah, Ltd. limited partnership in February 1959, in which Standard Uranium was the general and managing partner (A01-

0165). The Shenandoah, Ltd. partnership was formed in February 1959, and Standard Uranium paid $163,824.74 for a 50% ownership interest in the Marcy-Shenandoah properties (A01-0165).

Standard Metals Corporation Operations (1960 – 1985)

On December 30, 1959, Standard Uranium proposed to acquire Marcy-Shenandoah's interest in the Shenandoah, Ltd. partnership (A01-0165). This proposal was accepted on January 18, 1960, and Standard Uranium paid $515,000 for the 50% interest (A01-0165). Standard Uranium then changed its name to Standard Metals Corporation (Standard Metals) on June 3, 1960 (COSOS-001).

In the company's 1959 annual report, Standard Metals estimated that there was sufficient ore in the Shenandoah-Dives Mine to insure three to four years of operation for the mill (A01-0165). Based on a favorable outlook for metal prices, the company predicted that the mill would be put back into operation by July 1, 1960 (A01-0165). Throughout 1960, ore was stockpiled at the American Tunnel and other company mines in preparation to restart the mill (USGS-001). The company began plans to increase capacity at the mill from 700 to 1,000 tons per day (USGS-001).

The mill opened again in 1960 and operated during the year on company and custom ores (CBM-1960). Standard Metals described the basic six-step milling process at the facility, which remained basically the same from 1960 until at least the 1980s:

1. Crushing – Mine ores are reduced to uniform size class (1" – 3") employing jaw and cone crushing equipment.
2. Grinding – The grinding step employs a 12x8 rod mill and an 8x6 ball mill for further reduction in ore size class.
3. Gravity Concentration – Upon achieving desired ore size classification in the crushing and grinding circuits, the ore is slurried and subjected to gravity concentration for gold and silver extraction. Shaking tables, and a hydraulic jig are used to achieve this step. Jig concentrates are then subjected to an amalgamation process for further concentration of gold and silver values.
4. Flotation – After passing through the gravity concentration circuit, the ore slurry is processed by differential flotation for extraction of copper, lead and zinc values. A number of chemical reagents are introduced to the mill slurry during this phase of the operation to maximize recovery of the targeted products.
5. Thickening – Products removed from the ore slurry during flotation undergo primary moisture reduction by gravity thickening.
6. Filtration – Thickened flotation products are dewatered further by vacuum filtration, and then stockpiled for shipment to further refining off-site. (DRMS-026)

In its 1961 annual report, Standard Metals detailed significant work it accomplished in upgrading the mill:

> "During 1961 the 700 ton mill was altered and modified to accommodate ore from the Sunnyside mine. The roof of the mill adjoining the old flotation circuit was raised to permit installation of 20 additional flotation cells on the same floor level as the other cells. Ten of these cells have been installed and will be used for zinc concentrate; the remaining cells may be installed for recovery of a manganese concentrate at such time as manganese operations become economically feasible.
>
> The sampling plant was rebuilt to permit the recovery of a smaller sample.
>
> A new coarse ore bin has been designed to handle truck-hauled ore from the American Tunnel. This bin will be completed as early in 1962 as weather permits.
>
> When the bin is completed, the mill will be basically ready to operate; although if time permits many other small improvements can be made" (USGS-002).

In 1962, a new coarse ore bin was built, a new pan feeder installed, the mill tailings disposal system was modified and other changes made in order to bring the mill back into operation (USGS-003). Operations began on August 6, 1962, and 40,852 dry tons were milled by the end of the year (USGS-003). On December 5, 1962, Standard Metals entered into a two-year smelting contract with the American Smelting and Refining Company, whereby all Standard Metals concentrates would go to American Smelting and Refining Company smelters in Amarillo and El Paso, Texas (USGS-003).

The mill processed 132,219 dry tons of ore in 1963, 111,210 tons of it from the Sunnyside Mine (USGS-004). This ore produced 12,668 tons of concentrates, 4,449 tons of lead concentrate and 8,219 tons of zinc concentrates, for a total of 12,668 tons. Sunnyside Mine had been developed to the extent that it could provide the mill with 600 tons of ore day, five days a week (USGS-004). Standard Metals continued to evaluate ways to increase mill production (USGS-004). Ore mined from the Sunnyside Mine was hauled through the American Tunnel and transported by truck to the Mayflower Mill (A04-0001).

Figure 8, on the following page, illustrates the geography of the area. It shows the Mayflower Mill in relation to several mines which it received ore from.

The mill showed great progress in 1964, processing 160,853 tons of concentrates and producing 18,343 tons of concentrates, a considerable improvement over the prior year (USGS-005). The net smelter return increased from $7.39 per ton of ore in 1963 to $12.01 per ton in 1964 (USGS-005). This was attributed to "an increase in base metal prices, a more favorable smelter contract, a better grade of ore processed, and better mill operating practices" (USGS-005).

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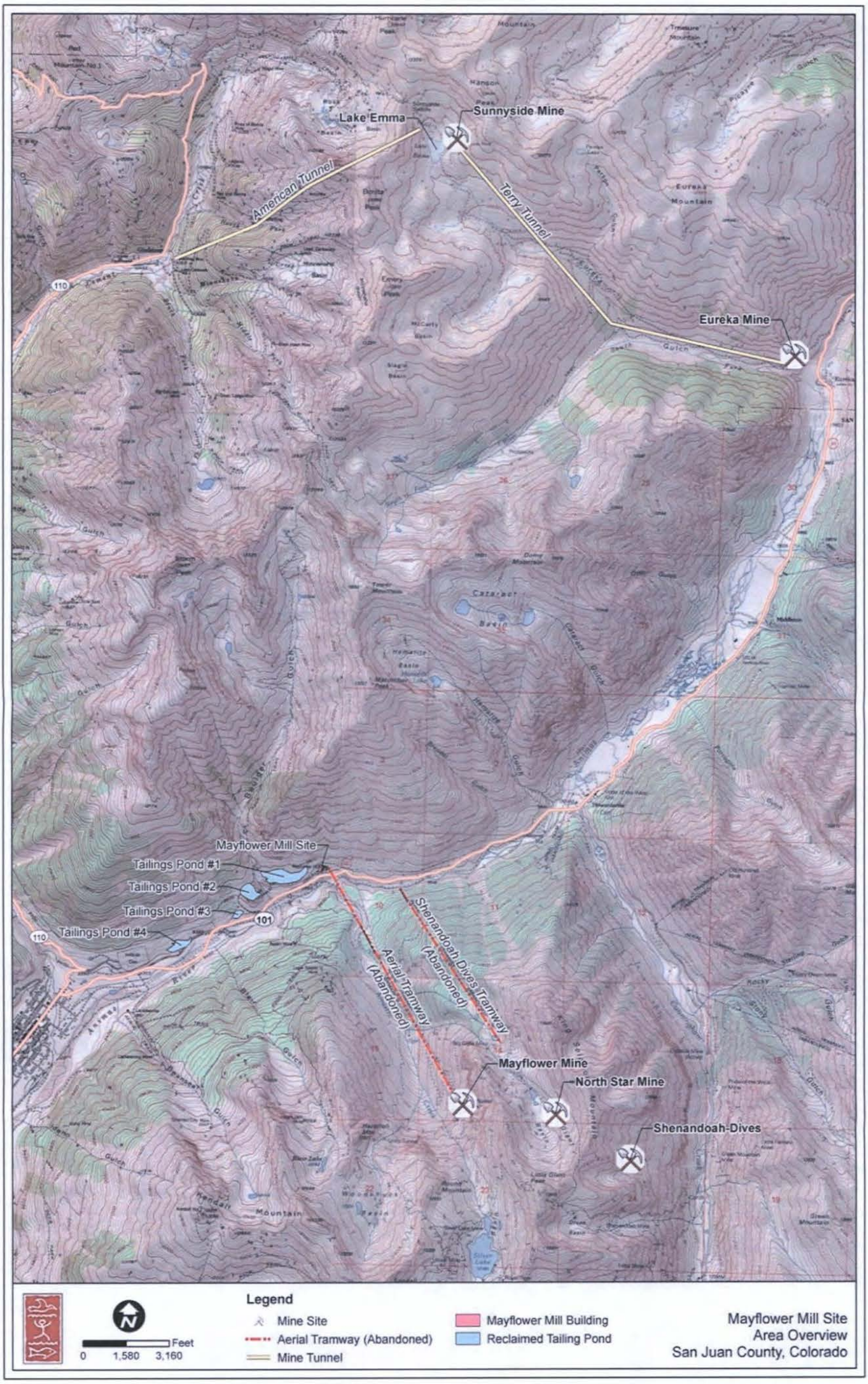

Figure 8: Mayflower Mill and Mines

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Standard Metals provided the following summary of its Shenandoah milling operations in 1965:

> "During the past year, extensive engineering and metallurgical evaluations have been made. Mechanical improvements were made in various areas of the existing plant. Tailing disposal systems were improved in line with current stream and river pollution regulations and practices. Metallurgical improvements were realized during the fourth quarter of 1965.
>
> Present plans are underway for the modernization and enlargement of our milling facilities during midyear to accommodate metallurgical efficiencies and increased tonnage capabilities.
>
> Present metal prices have encouraged mining operators in the San Juan area. Milling plans being considered include facilities to crush and sample custom ores. Such facilities would further encourage local operators to produce ores for concentration on an efficient, economical custom basis the Company's Shenandoah Mill" (USGS-006).

The CBM's Information Report dated January 4, 1966 stated that Standard Metals "rebuilt the ball mill and rod-mill area, and also discarded the old classifier for a cone classifier" (CSA-064). Figure 9 is an aerial photograph showing the mill facility at this time.

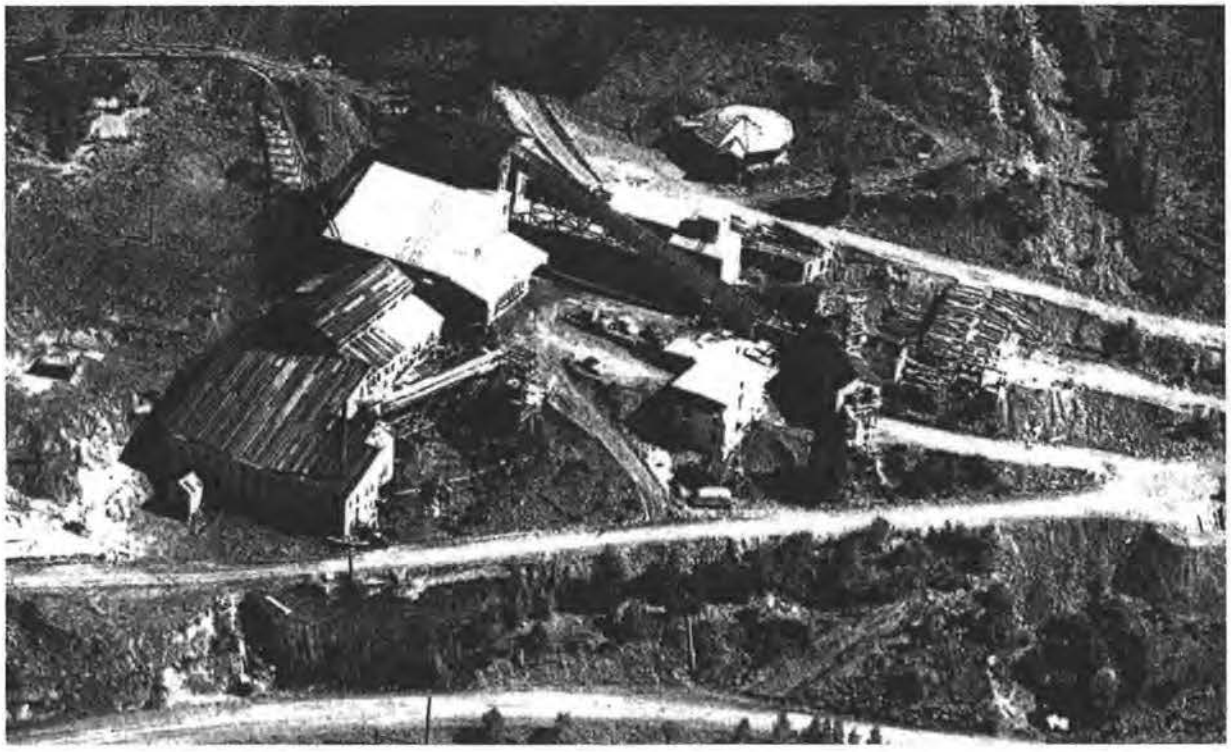

Figure 9: Aerial Photo of Mill, 1965 (USGS-006)

Standard Metals completed another mill expansion in late 1966, which it expected would allow a 20% overall increase in mine production in 1967 (USGS-007). This increase was "achieved by manipulation and amplification of existing equipment" (USGS-008). This involved the rearrangement of the crushing facilities to allow for finer grinding and screening (USGS-008).

By 1968, the mill was operating three shifts, at a 700 ton per day capacity (A01-0170). Ore was trammed to the American Tunnel portal at Gladstone, where it was loaded into 30-ton, end-dump trucks to be hauled to the mill (A01-0170). Concentrates were then contract-hauled to Ridgeway, Colorado, where they were loaded on railroad cars for shipment to the smelter (A01-0170). The mill produced gold, silver, lead, copper, zinc and cadmium concentrates with a gross value of $4,463,709 in 1968 and $5,546,201 in 1969 (USGS-010).

By 1971, approximately six feet of tailings were being stored on top of the tailings pond per year (CSA-069). The mill operated continuously during this year with the exception of a shutdown from March 15 until May 25 (CSA-069). The settling ponds, tailings pond and mill facility covered roughly five acres at this time, and the mill processed ore at a rate of 17,500 tons per month (CSA-069).

In March 1972, an amalgamator for the processing of gold was constructed at the mill (CSA-070). The CBM described the operation of the new process:

> "This consisted of a jig setup and a 1500-pound ball mill. The fine ore produced from the jig is run through this ball mill and ground with reagents for 4-hours and the mercury is added and run for two hours; the amalgam is run into a water solution and the impurities is [sic] floated off – the amalgam is then retorted and the sponge gold is shipped by truck and rail to the American Smelter & Refinery back east. The recovery is approximately 89%. Approximately five (5) acres of surface area is disturbed by this operation to date" (CSA-070).

A 24 by 24 duplex jig was installed in 1973 for higher gold recovery (CSA-072). During this year the mill operated at a rate of 17,500 ton per month for 260 days (CSA-072). Ore from the Sunnyside Mine was loaded into 40-ton haul trucks and transported nine miles by County Road 110 to the Mayflower Mill (DRMS-026).

Significant work was done on the mill and tailings ponds in 1974. The Bureau of Mines 1974 report on the mine described the operations and improvements at the mill that year:

> "This operation produced at a steady rate for 1974. The operator replaced two sets of flotation cells on the zinc circuit. The operator installed all new pipe and supports for the tailings and a new tailings pond was constructed on the lower side of the present pond. The new pond area covers approximately three acres. All new metal siding has

> been installed on all of the mill buildings and a general cleanup and repair has been conducted throughout the year" (CSA-074).

Construction was begun on the mill in 1975 to increase capacity from 700 to 1,000 tons per day (CSA-075). During this year, however, the main tailings pond washed out and discharged over 100,000 short tons of tailings and waste into Boulder Gulch and the Animas River (CSA-075; USGS-054). "Considerable cleanup" was required, and Standard Metals received a $40,000 fine for the incident (CSA-075; USGS-054).

Improvements in 1976 resulted in an increase in capacity from 700 to 1,000 tons per day (CSA-076). These improvements included the installation of a primary 8' x 12' rod mill and a large spiral classifier (CSA-076). During 1977, the mill operated at 1,000 to 1,200 tons per day (CSA-077; USGS-011). The mill expansion resulted in a 24% increase in tonnage milled (USGS-011). New float cells were installed to improve recovery (CSA-077). A new tailings pond was constructed, and a cyclone was used to create the dyke by separating coarse tailings (CSA-076, -079).

The mill shut down in 1978 due to the infamous incident on June 4, 1978 when the Sunnyside Mine breached Lake Emma, which drained out through the mine causing devastation to the mine workings and operations (CSA-081; USGS-054). The Grand Junction *Daily Sentinel* reported on the incident on June 11:

> "Damage to the Standard Metals Sunnyside Mine is tremendous. It is estimated that five to ten million gallons of water carried tons of tailings and lake-bottom sediments down 1,700 vertical feet through the upper four levels of the mine to the American Tunnel" (DUPL-001).

While the incident did not directly affect the Mayflower Mill, it remained idle while the mine (the mill's main source of ore) was cleaned and repaired. The mill restarted again on November 12, 1979 (CSA-081).

The mill was operated at half capacity through the first half of 1980 (CSA-083). The mill operated throughout 1981 and 1982, at a capacity of 900 – 1,000 tons of ore per day (A01-0141; USGS-012). Standard Metals stated that the mill processed approximately 275,000 tons of ore in 1983 and 237,969 tons in 1984 (A01-0141).

Standard Metals filed an Application for Mining and Reclamation Permit with the Colorado Department of Natural Resources Mined Land Reclamation Division in April 1984 (DRMS-026). This Application described the mill and various reclamation procedures at the facility, and stated that the mill produced lead-copper concentrate, zinc concentrate and a gold-silver amalgam (DRMS-026). The company estimated that "5% of the processed ore is recovered as merchantable product, the remaining 95%, primarily ground-up host rock, is combined with mill process wastewater and transported to the mill

tailings disposal site or tailings pond" (DRMS-026). At the time of the Application, only Tailings Pond No. 4 was active (DRMS-026).

The application also described the impact of mill operations on surface and ground water systems. The mill diverted surface waters from Arastra Creek at a maximum rate of 1,000 gpm, which was supplied to the mill by a gravity feed piping system (DRMS-026). Process water was then combined with discharged waste solids or tailings from the milling operation to form a slurry, which was transported to Tailings Pond No. 4 for disposal (DRMS-026). Diversion ditches upstream of active and inactive tailings disposal sites captured upland surface and ground water drainage and diverted it around tailings ponds to increase the stability of the structure, and mitigate pollution impacts (DRMS-026).

On March 5, 1984, just one month prior to the Application for Mining and Reclamation Permit and "after efforts to negotiate voluntary restructuring of debt obligations proved unsuccessful," Standard Metals and its subsidiaries filed voluntary petitions for reorganization under Chapter 11 of the United States Bankruptcy Code (USGS-013). The mill was shut down in March 1985 due to these financial difficulties, which included an operating loss of $2,622,000 in 1984 (USGS-013, -026). The company's 1986 annual report summarized the impact of the bankruptcy on the operation of the mill during this time:

> "The Silverton Properties, which included the Sunnyside Mine and the Mayflower Mill, constituted Standard's principal operating asset in 1984. In 1984, the mill processed 237,969 tons of ore and in 1985, prior to closure of the mine and mill in March, it processed 19,360 tons of ore. After closure of the mine and mill, Standard instituted a care and maintenance program to protect the property until it exhausted its available funds. On July 10, 1985, the Court authorized Standard to borrow funds on a priority basis to continue a limited care and maintenance program to preserve and secure the assets and to maintain compliance with certain environmental protection requirements through December 1, 1985. The July 10, 1985 Order authorized Standard to pay the salaries of certain employees to maintain accounting activities and to supervise the care and maintenance of the mine and mill, but otherwise limited Standard's authority to continue to operate its business" (USGS-013).

In October 1985, the bankruptcy court approved the sale of the Silverton Properties to Echo Bay Inc., a U. S. subsidiary of Echo Bay Mines Ltd., a Canadian corporation based in Edmonton, Alberta (USGS-013). In November 1985, Standard Metals closed the sale of its Silverton mining and milling operations and related assets to Echo Bay Inc. for $20 million (SEC-001; TITLE-015; USGS-013, -026).

Standard Metals retained a 30% net profits interest in the future operation of the properties, and was paid a $750,000 advance on the net profits interest on June 1, 1986 (USGS-013, -027). The company also received an additional advance from Echo Bay of $500,000 on June 23, 1987 (USGS-013).

Table 6: Mill Operational Data from 1962 to 1985				
Year	Ore Processed (tons)	Concentrates Produced (tons)	Capacity (tons daily)	Source
1962	40,852		400 – 600	CSA-058; USGS-003
1963	132,219	12,668	600	CSA-061; USGS-004
1964	160,853	18,343	600	CSA-062; USGS-005
1965	170,187	21,528		USGS-006
1966	183,604	21,018		USGS-007
1967	201,433	22,960		USGS-009
1968 – 1971	*No data available*			
1972	186,680			CSA-071
1973	191,349			CSA-073
1974 – 1975	*No data available*			
1976	244,860		700 – 1,000	CSA-076
1977	265,217		1,000 – 1,200	CSA-077; USGS-011
1978	122,702		1,200	CSA-078, -080
1979 – 1982	*No data available*			
1983	275,000		900	A01-0141
1984	237,969			USGS-013
1985	19,360			USGS-013

Sunnyside Gold Corporation Operations (1985 – 1996)

Echo Bay Inc. assigned all of its rights, title and interests to the mill and mill property to Sunnyside Gold Corporation ("SGC") on November 19, 1985 (DRMS-007; TITLE-015, -016). SGC was the indirect, wholly-owned subsidiary of Echo Bay Inc. (DRMS-007). Refurbishing of the mill began in late November 1985 and the mill reached commercial production levels on August 1, 1986, when it reopened as the "Mayflower Mill" (HAER-001, p. 77; USGS-027).

SGC made several improvements to the mill, reconfiguring the amalgamation gold-recovery circuit, which improved the amalgamation yield (HAER-001, p. 67-68). SGC also constructed a new lime storage building behind the main mill building (HAER-001, p. 68). SGC's annual report to the Colorado Mined Land Reclamation Board for the period of April 1987 to March 1988 provided the following description of activity at the mill:

> "Scrap iron consisting of old barrels, spent machine parts, and structural steel was sold to a recycler and removed from the site. A new drainage ditch and drop box were constructed for collecting and transporting floor drainage to the 'duck' pond, located near the guard shack. A Flyght submersible pump was installed in the pond to maintain the standing water level at a minimum. Accumulated sediments in the pond were excavated and returned to the mill several times during the year.

> A new reagent storage building was completed to the north of the mill, providing covered storage for reagents during the summer months. During winter, only lime is stored in the building due to avalanche danger.
>
> A new 2000 gallon above ground diesel fuel tank was installed to the south of the mill, replacing the smaller tank near the old tram terminal. No additional disturbance or reclamation is planned for the Mayflower Mill area in 1988" (DRMS-011).

SGC managed to turn a dismal $700,000 loss in the first quarter of 1987 into earnings of $500,000 in the second quarter (DRMS-005). A change in state labor law and increased efficiencies at the mill allowed the mill to operate 24 hours a day, seven days a week, with employees working 12-hour shifts (DRMS-005). Production at this time was 670 tons per day (DRMS-005).

In June 1991, SGC announced it was closing the mill (HAER-001, p. 69). Production at the mill ended in August 1991, and the mill was permanently closed by 1992 (DRMS-023; HAER-001, p. 77). The closure was the result of declining zinc prices and the lack of gold reserves remaining at the Sunnyside Mine (HAER-001, p. 69; SDMS 1020975).

Sunnyside Gold Corporation's mining permit required that the Mayflower Mill be torn down and the site reclaimed (INT-004). The mill had great historical significance, however, because it was one of the last remaining and most well-preserved examples of a twentieth-century flotation mill in the country, in additional to being of great importance to the history of Silverton, San Juan County and the State of Colorado (INT-003, -004).

San Juan County Historical Society Ownership (1996 – Present)

After lengthy and careful negotiations, SGC conveyed the mill to the San Juan County Historical Society ("SJCHS") via quit claim deed on May 29, 1996, so that SJCHS might preserve and maintain the facility (INT-004; TITLE-023). Prior to this conveyance, SJCHS entered into an Agreement and Covenant Not to Sue with the EPA, so that it could purchase the mill and preserve its historical value, while avoiding CERCLA liability (SDMS 1021571). This agreement stated that SJCHS's goals for the mill property were the following (all from SDMS 1021571):

- Preserve and maintain the significant historical structures and milling equipment and place the Mill on the National Register of Historic Places.
- Develop the Property as an educational, interpretive living history site including past operations, mining & milling technology, reclamation technology, social history, and associated trades and activities.

- Create a comprehensive historic theme which links the Property to other related entities and programs such as the Silverton National Historic Landmark district, the Society's Museum, Alpine Loop, etc.
- Preserve the areas on the Property already reclaimed to protect future environmental quality in those areas and for educational and interpretive purposes in this regard.
- Foster economic development by creating jobs and increasing tourism through the above activities and through other appropriate auxiliary business activities on the Property that would support the Society's programs and goals.

The mill had a commercial value of $1.5 million at the time of donation (SDMS 1062227). SGC's donation to SJCHS included a $120,000 grant to help SJCHS convert the mill into a historic tourist site (SDMS 1062227). SJCHS opened the Mayflower Gold Mill Tour on May 15, 1997 (INT-004).

Due to the expense of maintaining the mill, it was important to quickly prepare the mill to open to the general public to tour so it could being generating income (SDMS 1021566, 1021567). "Zeke" Zanoni, a member of the SJCHS Board, and chairman of the Mill Committee in 1996, provided the following details about this process:

> "The cleaning of the mill from an environmental standpoint has already been undertaken by Sunnyside Gold Corp. All hazardous materials like mill chemicals & reagents as well as standing oils and grease have been removed, with a general cleanup of remaining metal concentrates left in the mill after the shutdown. On November 17th, 1995, Tom Gillis of the Colorado Division of Minerals and Geology conducted an inspection of the mill with Sunnyside Gold management and representatives of the Historical Society present. A favorable written report of this inspection was submitted to the Mined Land Reclamation Board with a few minor safety hazards mentioned" (SDMS 1021567).
>
> "The cleanup from the Historical Society's position will be to eliminate dust and grime so the public will not soil themselves or clothing while on tour and make the mill more presentable in appearance" (SDMS 1021567).

As seen in Figure 10, the mill buildings are mostly still intact and preserved.

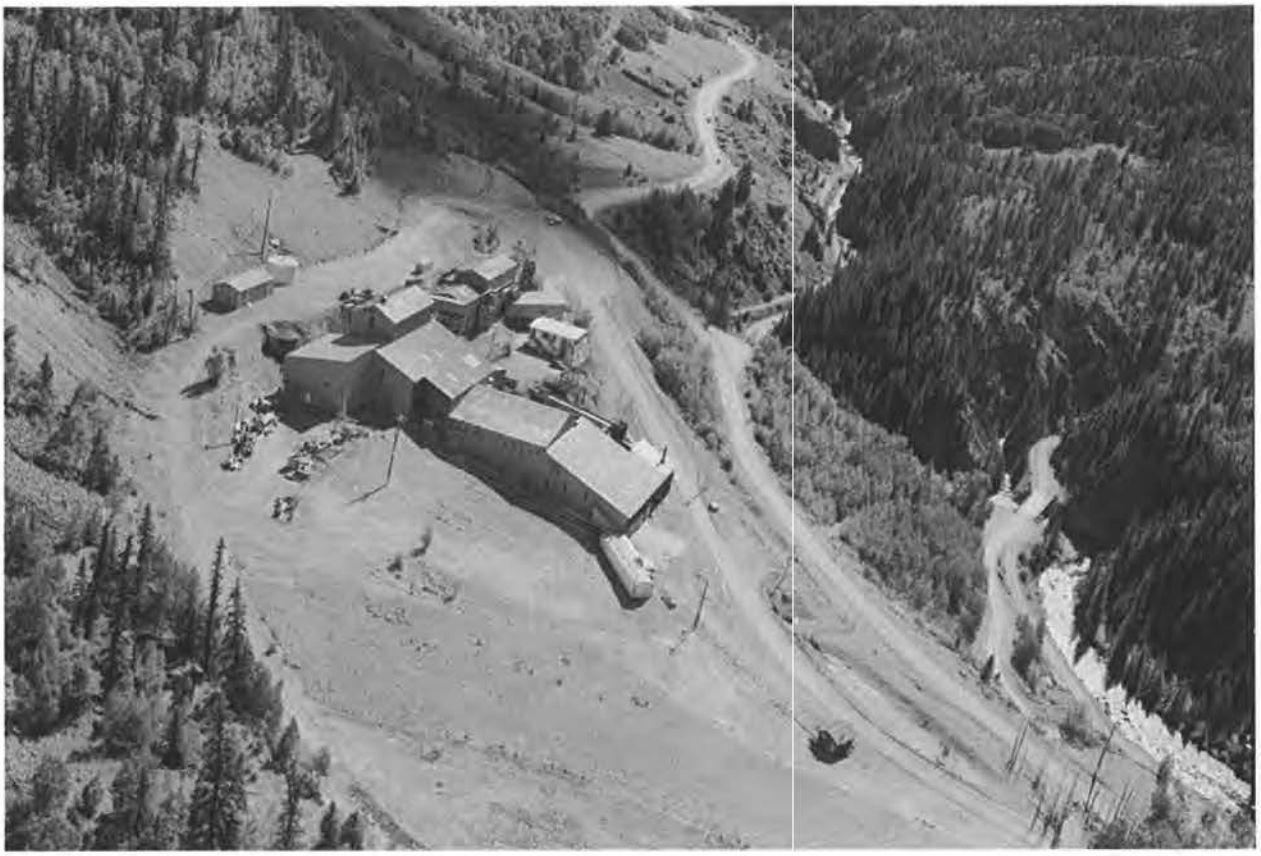

Figure 10: Aerial view of Mayflower Mill looking east-northeast, 2005 (HAER-003)

4.3 Mayflower Mill Regulatory History

This section presents the Mayflower mill's regulatory history with a chronological narrative, followed by a timeline of key regulatory events in the Site's history. Documentation of the Site's regulatory history began in 1977 when the Sunnyside Mine Complex, which included the Mayflower Mill, was issued a mining and reclamation permit in the state of Colorado. Consequently, state regulatory events are only detailed from 1977 onward. The following Colorado state permits are directly related to the Mayflower Mill and its tailings impoundments:

- **M-1977-378** – Mining and Reclamation Permit for the Sunnyside Mine Complex and Mayflower Mill issued on October 1, 1977. The permit authorizes the disturbance of land for mining operations contingent on reclamation plans approved by the Colorado Division of Reclamation, Mining and Safety (DRMS), and the Mined Land Reclamation Board (MLRB) (DRMS-003).

- **CO-0000426** – NPDES Permit for the Mayflower Mill issued by the Colorado Department of Health Water Quality Control Division [known today as the Colorado Department of Public Health and Environment, Water Quality Control Division, hereinafter referred generally as

'CDPHE'] in August 1982. The permit authorizes the discharge of pollutants from the Mayflower Mill tailings to the Animas River in accordance with numeric effluent limits and other conditions, and is referenced as Outfall 02 and Outfall 03 (SDMS 1060976; DRMS-025).

- **COR-040054** – Mayflower Mill Stormwater Permit issued by the CDPHE on October 31, 1992. The permit authorizes discharges composed entirely of stormwater from the Site to the Animas River (SDMS 1060976; DRMS-015, p. 79-80).

4.3.1 CHRONOLOGICAL REGULATORY HISTORY

The Mayflower Mill was originally constructed in 1929. The mill processed ores for multiple mines in the Animas Mining District that were owned or operated by the Shenandoah-Dives Mining Company. Major products produced at the mill between 1930 and 1953 were lead and zinc concentrates. Of the 700 tons of ore processed per day, approximately five percent was recovered as merchantable product. The remaining 95 percent, which was primarily ground-up host rock, was diverted to the mill waste or a tailings circuit during the final stage of the flotation process. Mill tailings were stripped of desirable mineral content and then combined with mill wastewater to form slurry that was pumped into the tailings disposal ponds (DRMS-026, p. 25). A detailed map of the Mayflower Mill features is provided as Figure 11.

During the Mayflower Mill operating period of 1930 to 1953, two tailing impoundments, known as Tailings Pond No. 1 and Tailings Pond No. 2, were constructed employing a gravity launder and decant system. Tailings slurry was pumped from the mill into wooden launders set on a downhill grade. The slurry was then discharged from the launders and onto the disposal site perimeter through spigots places at regular intervals in the launder. Variation in specific gravities of slurry particles was used in engineering pond construction, with the heaviest particles being deposited first, forming the tailings retention dam or berm. The smaller particles and slurry water were then deposited in sequence toward the pond interior. Decant towers were constructed at locations farthest from the tailings slurry entry points, and were used to decant clarified water from the pond interior, allowing maintenance of specified berm free board as the impoundment increased in height. By 1953, tailings depositional practices conducted on impoundments No. 1 and No. 2 had affected approximately 50 acres at the Mayflower Mill Site. In 1959, Standard Metals Corporation (Standard Metals) re-opened the Sunnyside Mine, activated the Mayflower Mill, and installed new crushing and grinding circuits, which increased mill capacity from 700 tons per day to 1,000 tons per day (DRMS-026, p. 25-26).

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Figure 11: Mayflower Mill Site Features

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The original tailings disposal system employed at the Mayflower Mill was utilized by Standard Metals on Tailings Pond No. 2 until 1974, and on Tailings Pond No. 1 until 1975. In 1976 an entirely new tailings disposal site and transport system were constructed and the old ponds were abandoned. During the construction of the new tailings disposal, a smaller interim impoundment, known as Tailing Pond No. 3, was used during production. By August 1976, Tailings Ponds No. 4 was completed, and deposition of tailings ponds commenced at that time [Tailings Pond No. 4 remained the only active tailings depositional site]. Deposition of tailings were modified to a downstream technique, in which the cyclone separator moved along a designated centerline and the tailings slurry particles were segregated into coarse and fine fractions based on specific gravity. The coarse particles were deposited downstream of centerline, forming the tailings retention dam or embankment, and the tailings fines and slurry water were deposited in sequence to the pond's interior or upstream of centerline (as seen in Figure 12). This system was seen as an improvement and eliminated tailings slurry spills, which frequently occurred from the launder during transport (DRMS-026, p. 27-28).

A toe drain was also installed into Tailings Pond No. 4 to sustain overall stability of the tailings pond structure, maintaining phreatic levels in the berm at a minimum. The toe drain was constructed with in-place river gravels, overlain by a pervious filter cloth to keep the gravels from plugging. F. M. Fox and Associates was the engineering firm that designed the specifications (DRMS-025).

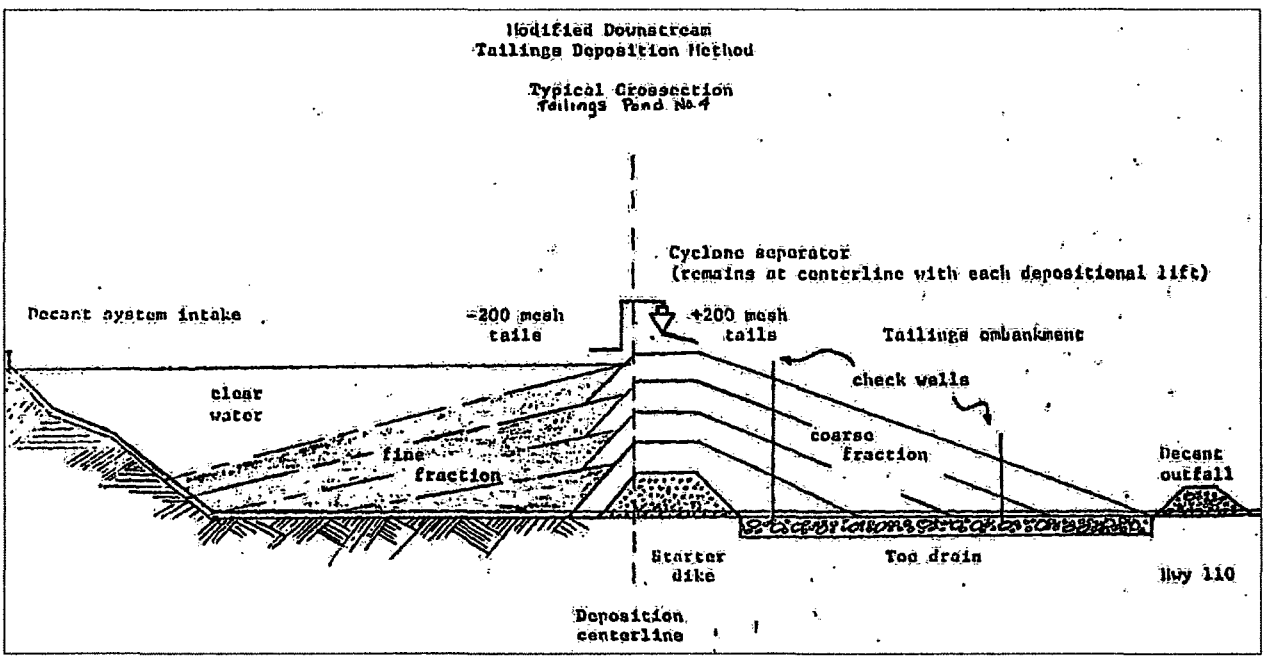

Figure 12: Mayflower Mill Tailings Deposition Method, circa 1982 (DRMS-026, p. 29)

On October 1, 1977, Standard Metals submitted to the Mined Land Reclamation Board (MLRB) a permit application for regular mining operations. On January 25, 1978, Standard Metals' permit application for regular mining and milling operations at the Sunnyside Mine and Mayflower Mill was approved by the MLRB. Under the mining permit for regular operations approved by the MLRB, 140 acres was listed as the total acreage affected by the current operation. The mining permit also included the American Tunnel Portal Area and the Terry Tunnel area (DRMS-003).

Water released from the pond through the decant system was discharged at two locations, Outfalls 002 and 003 (depicted in Figure 11), which were assigned effluent limitations and monitoring by the CDPHE. A general drawing of the water delivery and filtration system is depicted in Figure 13 (DRMS-026, p. 28).

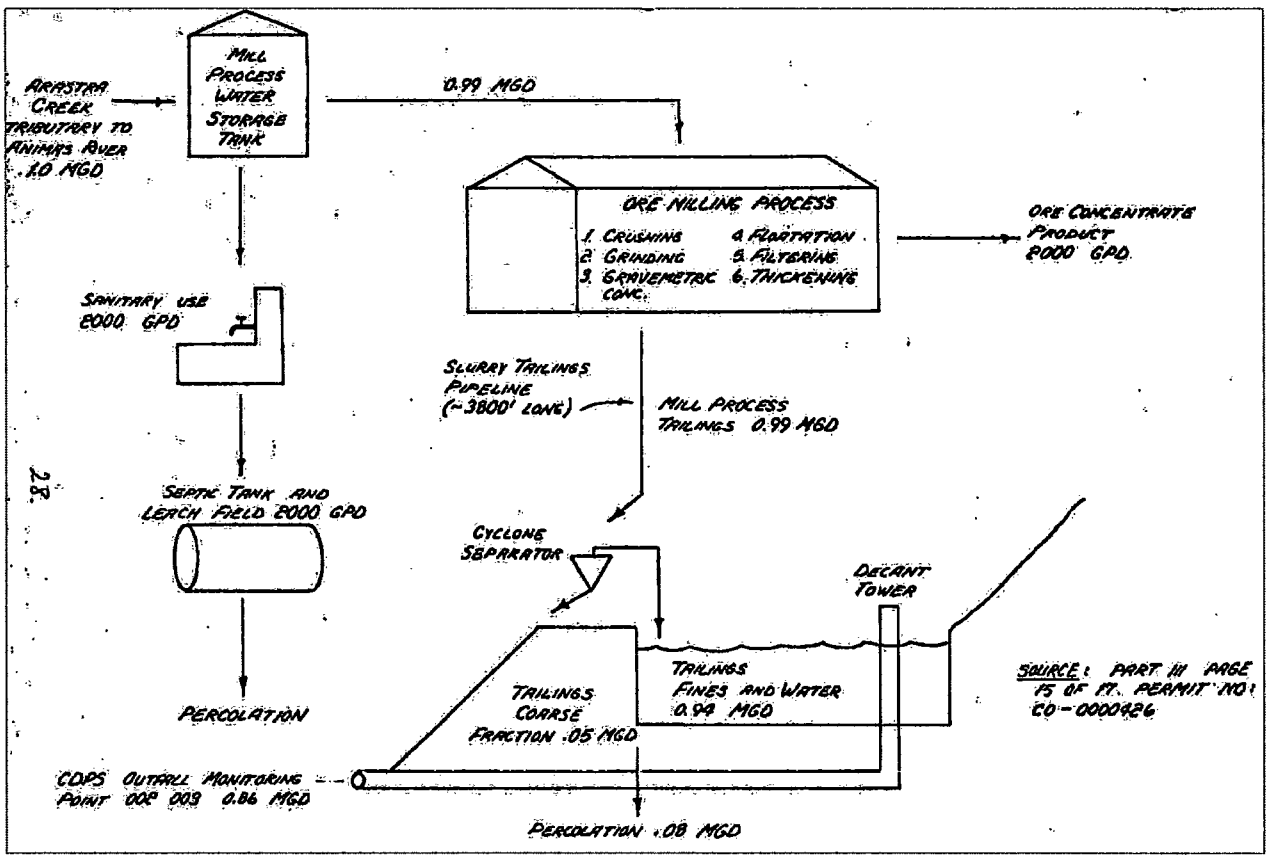

Figure 13: General Schematic of Mayflower Mill's Ore Milling Process and Waste Delivery System (DRMS-026, p. 30)

The CDPHE was concerned that tailings waste water from the impoundments were seeping into ground water and the adjacent Animas River. The CDPHE requested that Standard Metals perform tests on the Site to confirm or disprove such occurrences. Studies conducted by Standard Metals in 1982 revealed that the seepage from Tailings Pond No. 4 had occurred along the embankment by three factors: high

phreatic levels in the berm; migration of pond water through the roadbed at the northeast abutment of the tailings pond with the roadbed; and infiltration of the Animas River into the toe drain during periods of high run-off. Standard Metals attempted to mitigate seepage from the embankment with a series of plans for seepage controls (DRMS-025, -026).

The CDPHE continued correspondence concerning the seepage of Tailing Pond No. 4. Water quality monitoring was installed around the perimeter to determine seepage and phreatic levels; modification of tailings deposition methods were performed; and a bentonite seal was installed at the northwest tailings embankment. In July 1982, seepage from the toe drain averaged 100 gallons per minute (gpm), and after Standard Metals installations, the flow from the toe drain was reduced to 10 to 20 gpm (DRMS-029, -030). The CDPHE commented on the stability of the tailings impoundment berm after these measures:

> "The corrective measures instituted by Standard Metals will control some of this seepage, but probably not eliminate it. Because of the alluvium underlying the pond, it would be reasonable to assume that some ground water flow exists between the pond and the river, this situation may also exist with the blanket drain. The only way to potentially eliminate seepage would be to line the pond or construct a grout-type cutoff curtain and corresponding pump-back system. However, both such measures may be impractical at this site" (DRMS-031).

Standard Metals was sent a Notice of Violation and Cease and Desist Order (NOV-CDO) on October 23, 1985 for inadequately disposing of mine and mill refuse; mill tailings and drainage control structures at the Site were inadequate and/or unmaintained; and the operator inadequately disposed of mine water treatment sludge, a potentially acid forming and toxic producing material at the Terry Tunnel and along the banks of the Animas River. The MLRB assessed a civil penalty of $37,200, or $12,200 contingent upon compliance with the stipulations to the technical revision to Mining Permit # M-1977-378 (DRMS-006, -010).

In late 1985, Sunnyside Gold Corporation (SGC) became the owner and operator of the Site. Further concerns about the tailings at the Site did not dissolve with new ownership. Inspection reports from the CDPHE revealed that seepage from the toe drain continued and that sludge disposal at the Site was a concern (DRMS-033). SGC received a second NOV-CDO on August 24, 1988 from the MLRB. SGC was to provide short-term temporary waste rock acid-production mitigation measures, as well as long-term final reclamation waste rock mitigation plans in its mining permit – specifically pertaining to the American Tunnel and reclamation of Tailings Pond No. 4 (DRMS-012). The CDPHE allowed SGC to remove slurried pond sludge at the American Tunnel and transport it to Tailings Pond No. 4, contingent on further monitoring (DRMS-034).

After cessation of operations by SGC in 1991, all the tailings pond embankments were re-contoured to a predominant 2 ½ to 1 percent slope for stability and erosion control. Identified potential sources for

stormwater exposure to pollutants were the tailings ponds associated with the ore processing mill. Erosional characteristics of the embankments by stormwater were another potential identified source. The slopes and tops of the ponds, with the exception of a portion of the top of Tailings Pond No. 4, were covered with native overburden, soil amendments added and re-vegetated with the seed mixture in the MLRB permit by 1998. Up-slope stormwater runoff ditches were constructed to divert runoff water away from and around the ponds as well (CDPHE-023).

The following list are reagents formerly used at the Mayflower Mill and are currently a concern for stormwater pollution: sodium cyanide; zinc sulfate; sodium sulfate; liquid promotor (unknown composition); sodium ethyl xanthate; potassium amyl xanthate; dowfroth frother; polypropylene glycol methyl ether; lime; copper sulfate; tergitol (nonionic surfactant); calcium hypochlorite; cationic coagulant; anionic flocculent; sodium hydroxide; sodium gluconate; lead nitrate. Other potential pollutants in the tailings ponds that could come in contact with stormwater runoff are residual metals, such as aluminum, cadmium, copper, lead, zinc, iron and manganese (CDPHE-023).

The American Tunnel was a growing concern for the state of Colorado after the cessation of the Sunnyside Mine complex in 1991. SGC and the CDPHE began discussions of mitigating water discharge and pollution from the American Tunnel. On May 6, 1996, SGC and the CDPHE entered into a Consent Decree ordering further reclamation on the Mayflower Mill tailings area, along with placing bulkhead in the American Tunnel. The reclamation plan would terminate SGC's discharge permits from the American Tunnel and Terry Tunnel, but would maintain the outfalls at Tailings Pond No. 4. Tailings Pond No. 4 would remain as an interim tailings impoundment for the American Tunnel and Terry Tunnel until full reclamation was complete. Discussions leading up to a full reclamation of the Site included donating the Site to the San Juan County Historical Society. In 1996, an additional five year plan was implemented to reclaim the entire Mayflower Mill and the Sunnyside Mine Complex for the purpose donating the property to the San Juan County Historical Society (DRMS-016, -017, -018).

By 2003, Tailings Ponds No. 1, No. 2, and No. 3 were released from the permit due to successful completion of reclamation (see table below). Tailings Pond No. 4 remained active to receive sludge from the water treatment plant at American Tunnel. Final reclamation of the water treatment plant at American Tunnel commenced 2006, and final reclamation of Pond No. 4 commenced 2007 (DRMS-038; CDPHE-012).

In July 2011, an inspection report from the DRMS reported that the top of Tailings Pond No. 4 had been graded to direct all surface drainage to the west where it is routed around the southwest perimeter by the west diversion ditch. The west diversion ditch also diverts upland drainage as well as ground water from up gradient areas intercepted by a ground water intercept wall. The affected lands appeared stable no evidence of settling slumping or excessive erosion was observed. Iron staining was observed within the west diversion ditch for Tailing Pond No. 4, originating at a drain outlet for the ground water intercept. The source of the metals drainage is believed to be up slope of Tailing Pond No. 4 and possibly of natural occurrence. Pictures from the July 2011 DRMS inspection report are on the following pages:

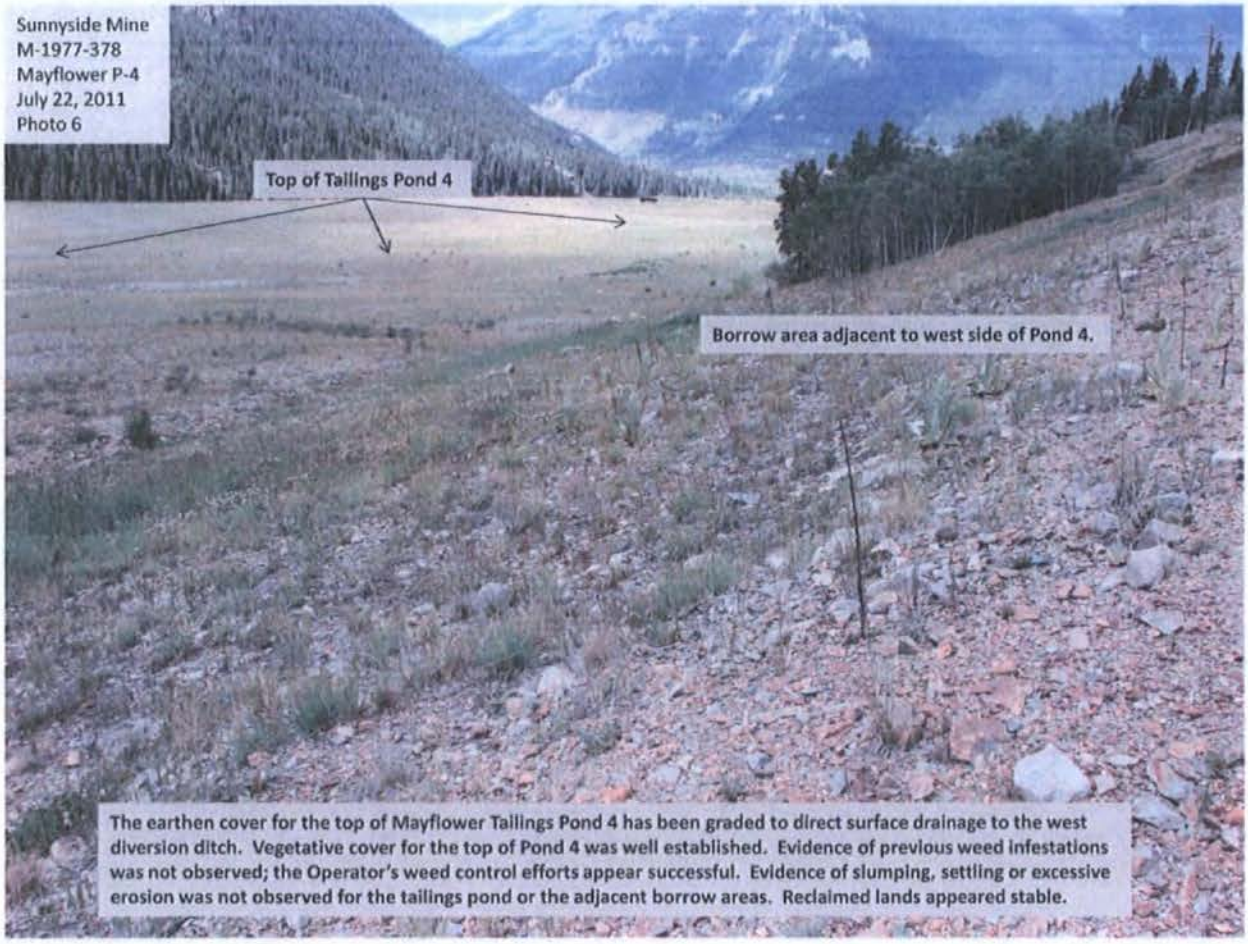

Figure 14: July 2011 DRMS Mayflower Mill Site Inspection Tailings Pond No. 4 (DRMS-039)

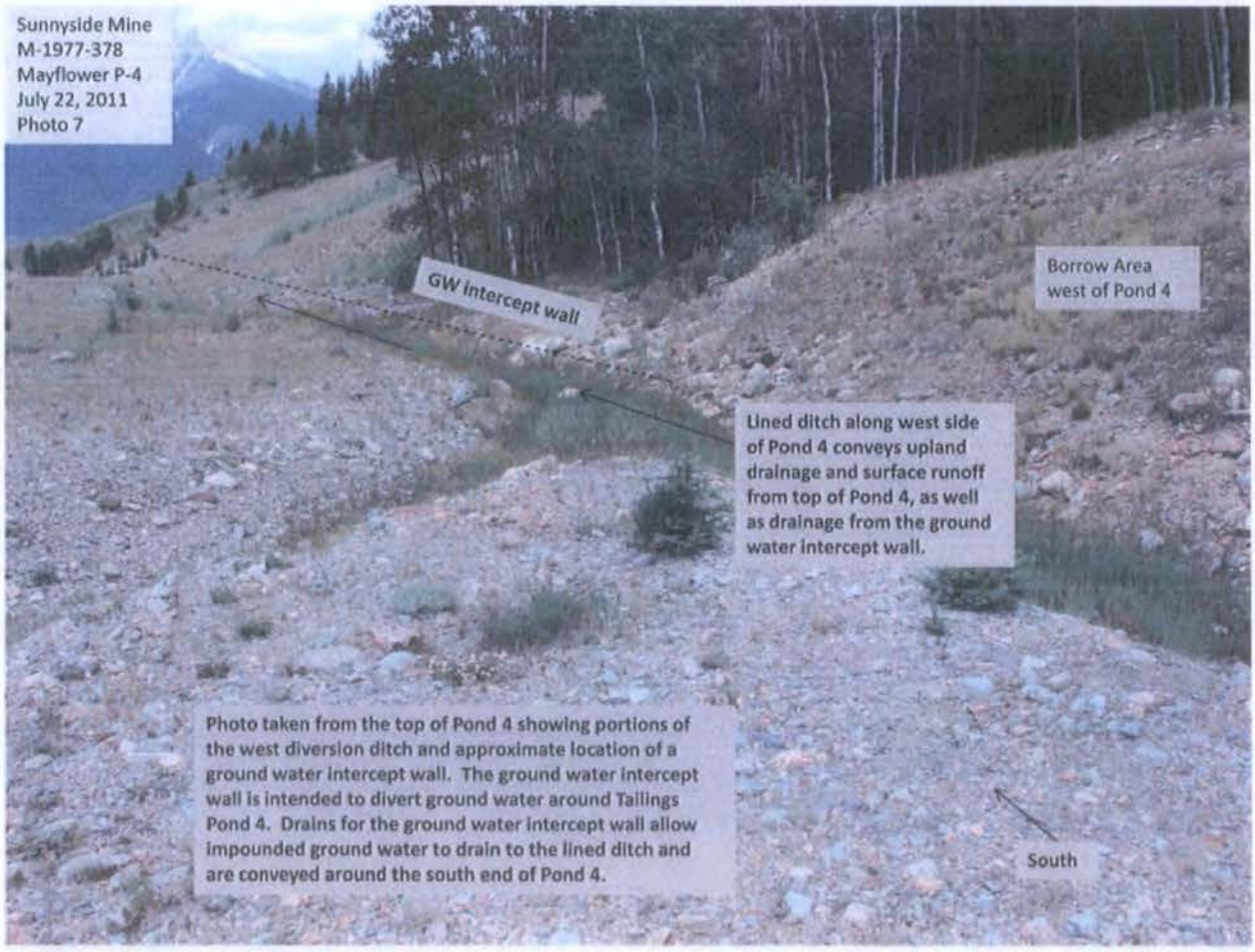

Figure 15: July 2011 DRMS Mayflower Mill Site Inspection Tailings Pond No. 4 – Intercept Wall (DRMS-039)

The following table summarizes key events in the Site's regulatory history, and supplements the regulatory narrative:

Table 7: Mayflower Mill Site Regulatory Timeline

Date	Event	Source
1977	On October 1, 1977, Standard Metals submitted to the Mined Land Reclamation Office (known today as the Division of Reclamation, Mining and Safety "DRMS") a permit application for regular mining operations. On January 25, 1978, Standard Metals' permit application for regular mining and milling operations at the Sunnyside Mine and Mayflower Mill was approved by the Mined Land Reclamation Board (MLRB). The MLRB approved Standard Metals mining permit (# M-1977-378) for 140 acres of disturbed land for the purposes of mining and milling operations.	DRMS-003

Table 7: Mayflower Mill Site Regulatory Timeline		
Date	**Event**	**Source**
Aug. 1982	CDPHE issued NPDES Discharge Permit # CO-0000426 for the Mayflower Mill facility.	DRMS-025
Feb. 2, 1983	Standard Metals submitted Seepage Control Plan for Tailings Pond No. 4 as required by Discharge Permit # CO-0000426.	DRMS-027
Feb. 18, 1983	Questions posed by the CDPHE concerning Standard Metals' Seepage Control Plan for Tailings Pond No. 4.	DRMS-030
Oct. 20, 1983	Concerns and suggestions regarding Standard Metals Seepage Control Plan for Tailings Pond No. 4 indicates that the pond should either be lined or have a pump-back system to stop further seepage.	DRMS-031
Oct. 23, 1985	Standard Metals was sent a Notice of Violation and Cease and Desist Order (NOV-CDO) on October 23, 1985 for the following reasons: the operator had inadequately disposed of mine and mill refuse; the mill tailings and drainage control structures at the Site were inadequate and/or unmaintained; the operator inadequately disposed of mine water treatment sludge, a potentially acid forming and toxic producing material at the Terry Tunnel and along the banks of the Animas River. Standard Metals was in violation of C.R.S. 34-32-116(1) (d), (e), (h), and (i). The MLRB assessed a civil penalty of $37,200, or $12,200 contingent upon compliance with the stipulations to the technical revision to Mining Permit # M-1977-378.	DRMS-010; DRMS-006
Nov. 8, 1985	Standard Metals responded to the NOV-CDO with a Notice of Compliance. All production related to mining and mill operation was terminated from October 23, 1985. The civil penalty was to be paid within 30 days of November 8, 1985. Technical revisions to the reclamation plan were drafted and monitoring and sampling procedures were put in place for the Sunnyside Mine and Mayflower Mill.	DRMS-009
Jun. 19, 1986	CDPHE expressed concern for the toe drain seepage and sludge disposal near Animas River.	DRMS-033
May 25, 1988	SGC continued to submit annual reports pursuant to Mining Permit # M-1977-378: Tailings Pond No. 4 – Operating and receiving normal maintenance. Tailings Pond No. 3 – No longer in use for tailings, but is used for emergency overflow. Tailings Pond No. 1 and No. 2 – In process of reclamation and being filled. Deposition of tailings on Ponds No. 1 and No. 2 stopped in mid-1970s.	DRMS-011
Aug. 24, 1988	The MLRB issued a NOV-CDO on August 24, 1988. The MLRB ordered that SGC provide short-term temporary waste rock acid-production mitigation measures, as well as long-term final reclamation waste rock mitigation plans.	DRMS-012
Oct. 1, 1991	Notice of Temporary Cessation of Mining Operation for the Sunnyside Mine and Mayflower Mill because of declining ore body grades and declining metal prices.	DRMS-023
Oct. 31, 1992	CDPHE issued the Mayflower Mill Stormwater Permit (# COR-040054) to SGC, which authorized discharges composed entirely of stormwater from the Site to the Animas River.	DRMS-015, p. 79-80
Aug. 11, 1995	Tailings areas were under reclamation except for the Tailings Pond No. 4 area, which was to undergo partial reclamation. The mill buildings were planned for	DRMS-015, p. 12-15

Table 7: Mayflower Mill Site Regulatory Timeline		
Date	**Event**	**Source**
	donation to the San Juan County Historical Society for tourist related activities. Tailings Pond No. 4 – Area still to be reclaimed due to its use for deposition of water treatment residue from the Terry Tunnel and American Tunnel water treatment plants, mine and mill waste material and debris from reclamation of other sites. Tailings Pond No. 3 – The capping and planting of the top is complete other than monitoring and maintenance. Establishing vegetation proved more difficult and required more maintenance. Tailings Pond No. 1 and No. 2 – The stabilization and planting is complete other than monitoring and maintenance.	
May 6, 1996	Consent Decree signed on May 6, 1996 between the CDPHE and SGC that specified Sunnyside Gold Corporation's final termination procedures for water discharge permits: NPDES Permit # CO-0027529 (American Tunnel Portal) and NPDES Permit # CO-0036056 (Terry Tunnel). The Division of Minerals and Geology (DMG) recommended, and the MLRB approved, a technical revision to SCG's Reclamation Plan on November 18, 1993, regarding the installation of underground bulkheads for the American Tunnel.	DRMS-016; DRMS-017
Aug. 13, 1996	SGC requested an additional five years of temporary cessation for the Mayflower Mill. Final reclamation of Tailings Pond No. 4 could not occur until permit release was achieved under the May 1996 Consent Decree.	DRMS-018
Oct. 22, 1996	Inspections for Stormwater Permit # COR-040054 were in compliance, and the area was in the final stages of reclamation. Drainage was modified to compliment the final reclaimed configuration. The Site property was being converted to other uses by transfer ownership.	CDPHE-019
May 15, 1998	The major potential sources for stormwater exposure to pollutants were the tailings ponds associated with the ore processing mill. Erosional characteristics of the embankments by stormwater were another potential source.	CDPHE-023
Apr. 1998 – Mar. 1999	During 1998, SGC added three projects to the Consent Decree B list (optional project list) during the 1998 report year: Upland Hydrological Control project; Tailings Pond No. 4 Upland Groundwater Diversion Project; and Tailings Pond No. 4 Surface Drainage Modification Project. Tailings Pond No. 4 – A Technical Revision (TR-21) to the reclamation plan was submitted and approved. TR-21 modified the drainage along the toe of the pond by adding a liner and provided an outlet culvert. TR-21 also included a project to extend the groundwater diversion up-gradient from the pond. Further usage for containment of material removed from the American Tunnel water treatment settling ponds and mine waste occurred (per the May 1996 Consent Decree). Tailings Pond No. 3 – Activity consisted of stormwater sediment catchment maintenance, and vegetation monitoring. Tailings Ponds No. 1 and No. 2 – TR-21 contained a project to improve the construction of a lined diversion ditch to prevent infiltration of diverted water.	DRMS-020; CDPHE-024; CDPHE-025; CDPHE-026; CDPHE-027

Table 7: Mayflower Mill Site Regulatory Timeline		
Date	**Event**	**Source**
	Vegetation and stormwater monitoring and maintenance occurred.	
Oct. 14, 1999	SGC notified the CDPHE that the Upland Hydrological Control Project was completed, and requested a final inspection to satisfy the May 1996 Consent Decree "B List" of projects relating to the Mayflower Mill.	DRMS-035
Oct. 2, 2001	DMG inspected SGC's construction of approximately 1,100 feet of upland groundwater intercept ditch, located along the northeast end of Tailings Pond No. 4. The project tied into the previously constructed surface and groundwater diversion structures across all upland areas for Tailings Pond No. 4. The DMG observed that SGC had completed the Upland Groundwater Diversion Project for Tailings Pond No. 4 in accordance with the May 1996 Consent Decree.	DRMS-035
Jan. 2003 – Dec. 2003	During 2003, the required final Site reclamation projects were completed. Completion of projects in November 2003 involved changes that required an update to Stormwater Permit # COR-040054: The decant outfall and inlet from Tailings Pond No. 4 was permanently sealed with concrete. Tailings Pond No. 4 was contoured and the tailings material capped. This reclaimed area now contributed to stormwater runoff to the existing diversion ditch. Tailings Pond No. 4 was still subject to NPDES (#CO-0000426), Stormwater Permit (#COR-040054) and MLRB Permit (# M-1977-378). Tailings Pond No. 1, No. 2, and No. 3 and the area east of Mayflower Mill were released from the Mined Land Reclamation Permit, as well the Stormwater Permit.	CDPHE-012; DRMS-028; DRMS-037
Apr. 2010 – Mar. 2011	Monitoring of the Mayflower Mill complex continued. Monitoring results continue to exhibit increased zinc and manganese concentrations between upstream and downstream monitoring points, although the differential for zinc appears to have been reduced as a result of the completed diversions and reclamation projects.	DRMS-021
Apr. 2011 – Mar. 2012	Monitoring of the Mayflower Mill complex continued. Monitoring results continue to exhibit increased zinc and manganese concentrations between upstream and downstream monitoring points, although the differential for zinc appears to have been reduced as a result of the completed diversions and reclamation projects.	DRMS-022

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5.0 POTENTIALLY RESPONSIBLE PARTIES (PRPs)

5.1 INTRODUCTION

(b) (5)

[redacted]

Table 8: Summary Table of Potentially Responsible Parties (PRPs)

PRPs	Class *	Period	Association with Site	Status / Comments
[redacted]	[redacted]	[redacted]	(b) (5) [redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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[redacted]	[redacted]	[redacted]	[redacted]	

Table 8: Summary Table of Potentially Responsible Parties (PRPs)				
PRPs	Class *	Period	Association with Site	Status / Comments
[redacted]	[redacted]	[redacted]	(b) (5) [redacted]	[redacted]
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Table 8: Summary Table of Potentially Responsible Parties (PRPs)				
PRPs	Class *	Period	Association with Site	Status / Comments
(b) (5)				

5.2 CURRENT OWNERS AND OPERATORS

(b) (5)

The following **Current Owners** of site property were identified:

5.2.1 CORPORATE CURRENT OWNERS AND OPERATORS

(b) (5)

(b) (5)

[redacted]

[redacted]

[redacted]				

[redacted]	[redacted]	[redacted]	(b) (5) [redacted]	[redacted]
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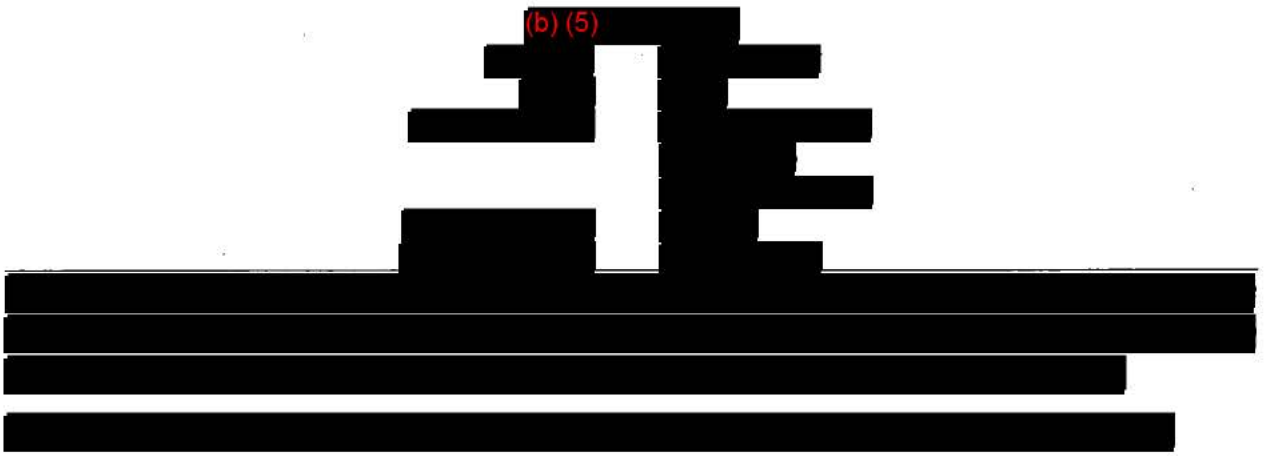

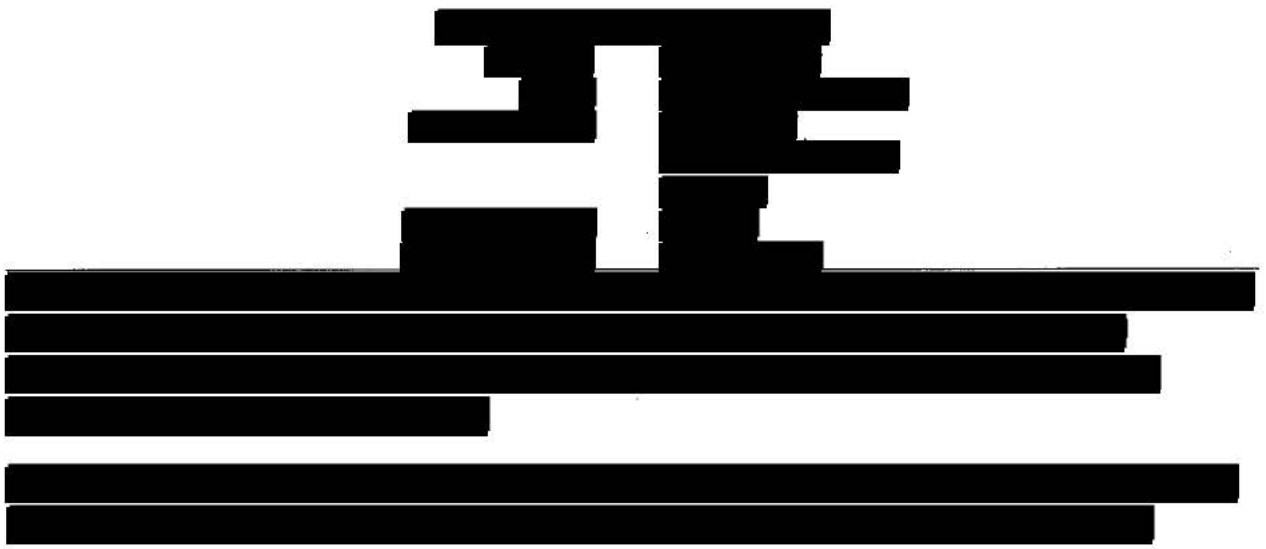

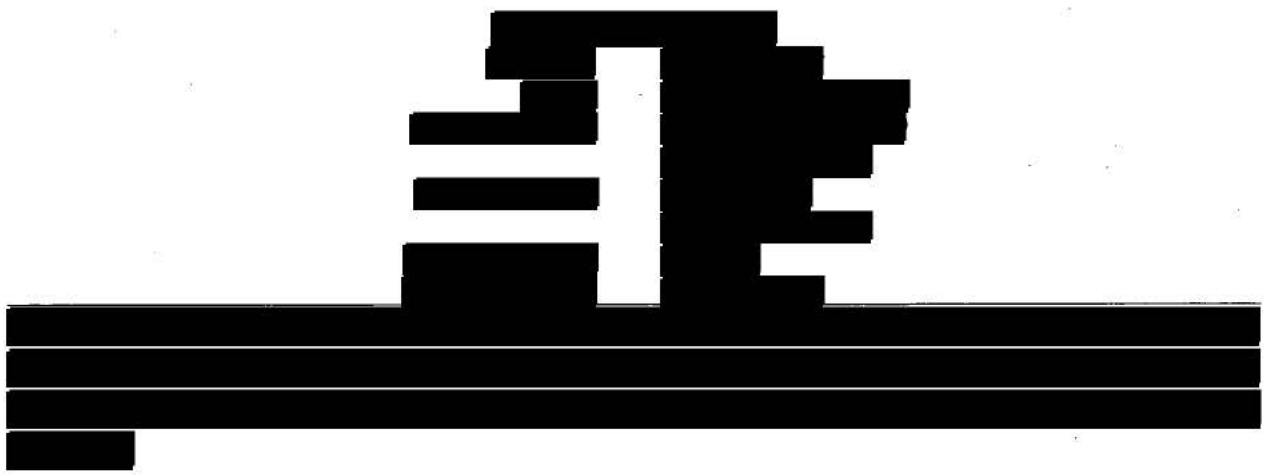

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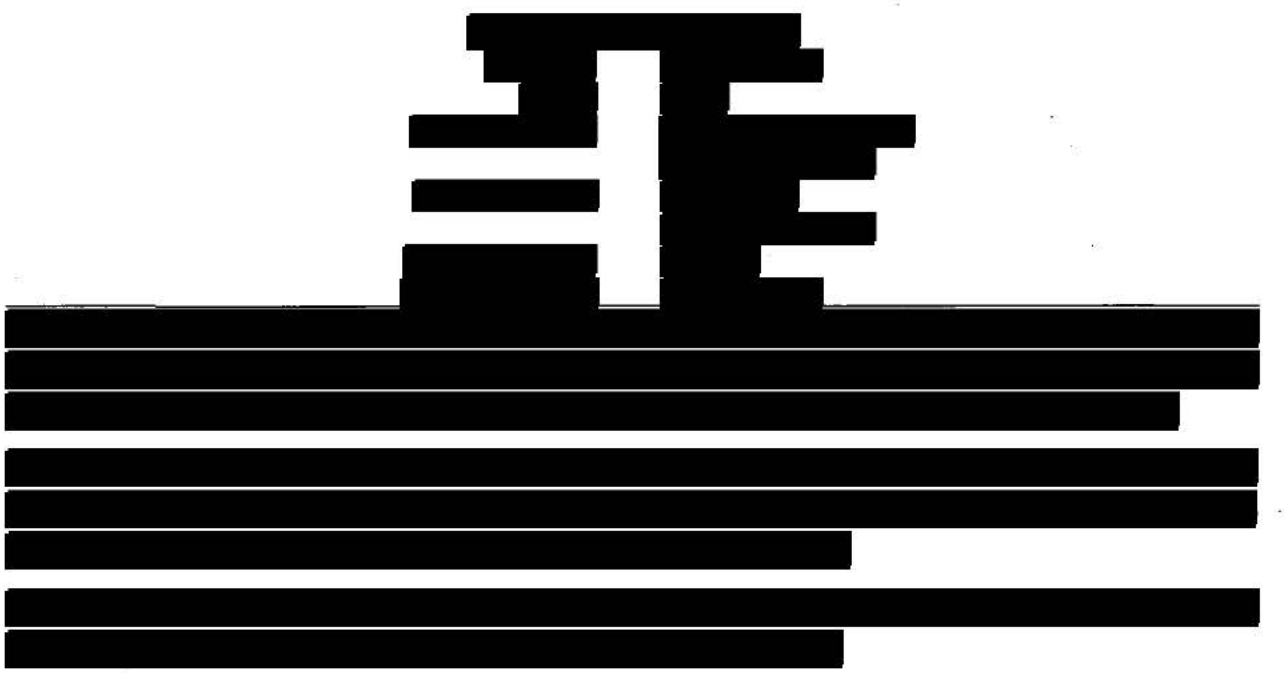
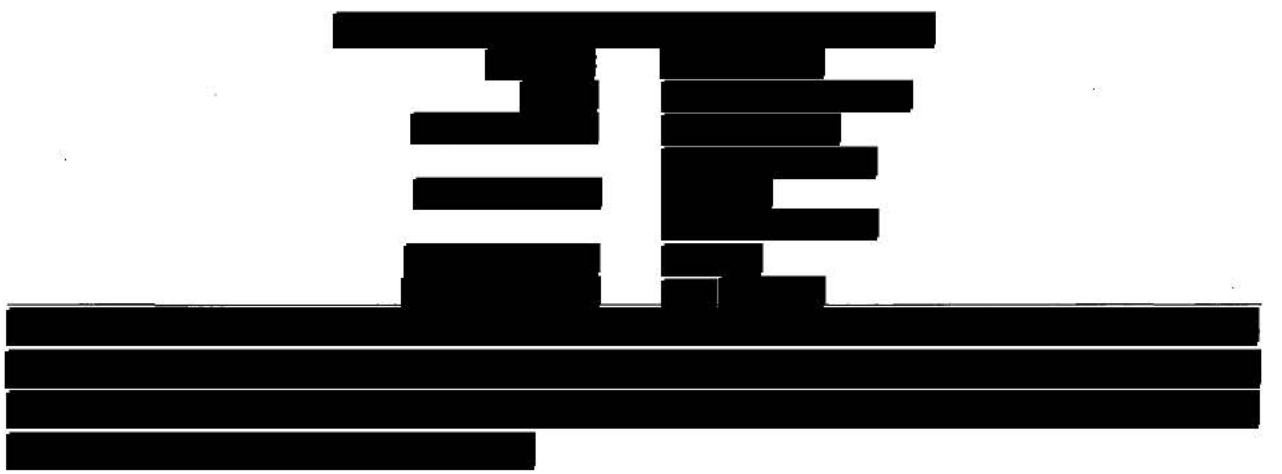




(b) (5)

5.2.2 INDIVIDUAL CURRENT OWNERS AND OPERATORS

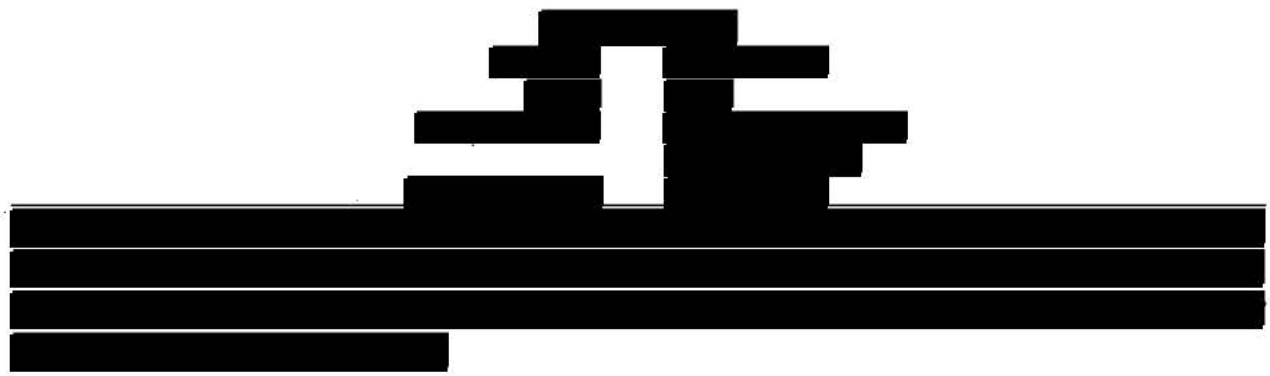
(b) (5)

(b) (5)

[redacted]

[redacted]

[redacted]



(b) (5)

[redacted]

5.3 PAST OWNERS AND OPERATORS

(b) (5)

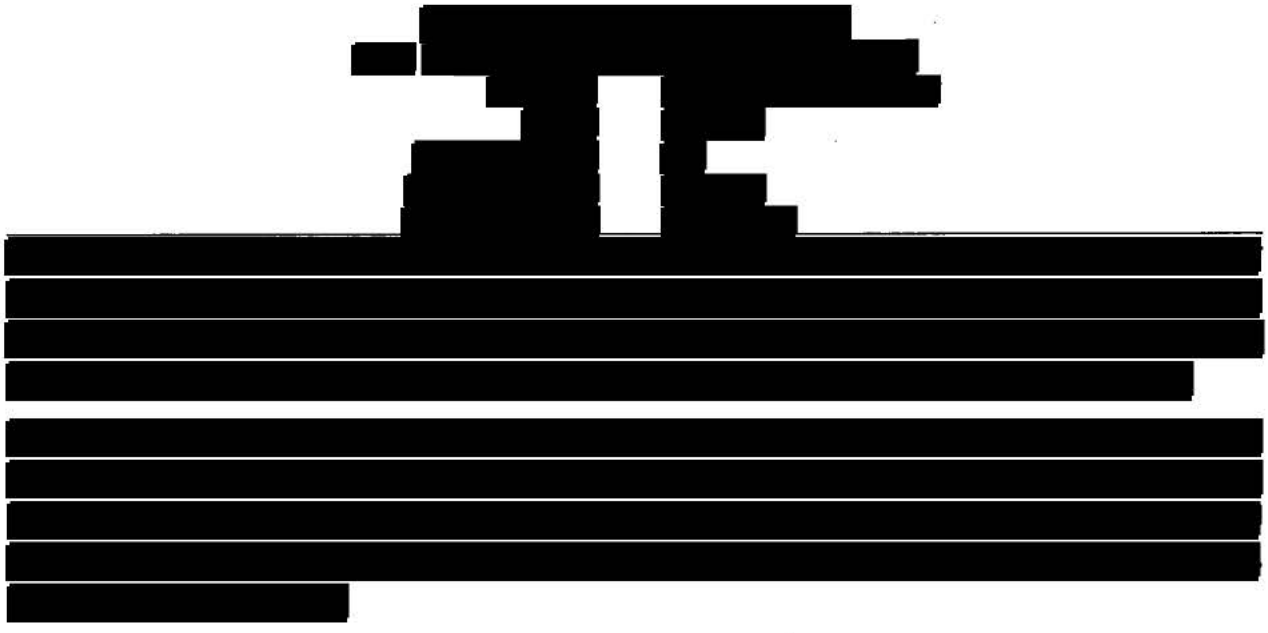
The following **Past Owners and/or Operators** were identified within site:

5.3.1 CORPORATE PAST OWNERS AND OPERATORS

(b) (5)

(b) (5)

[redacted]



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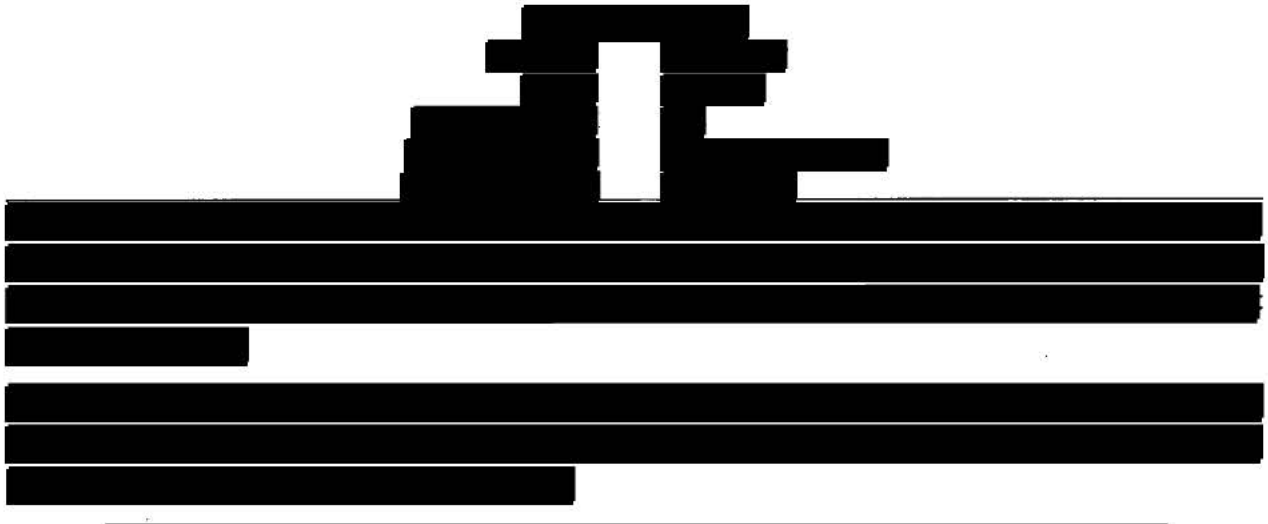
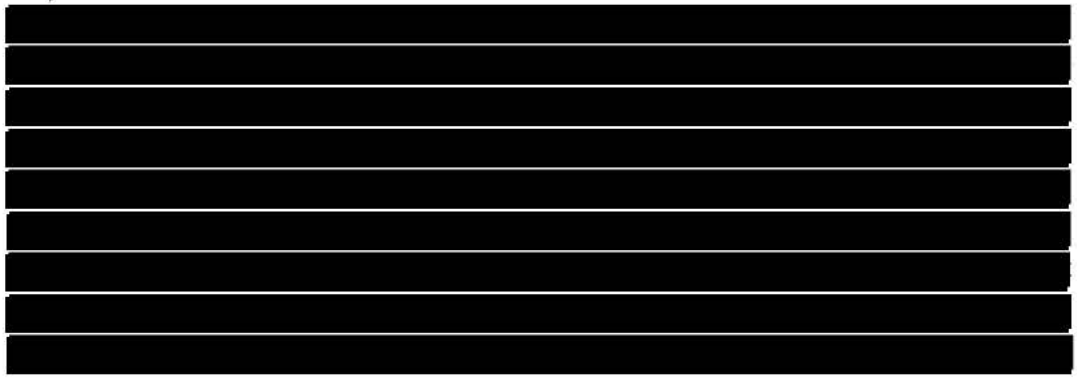
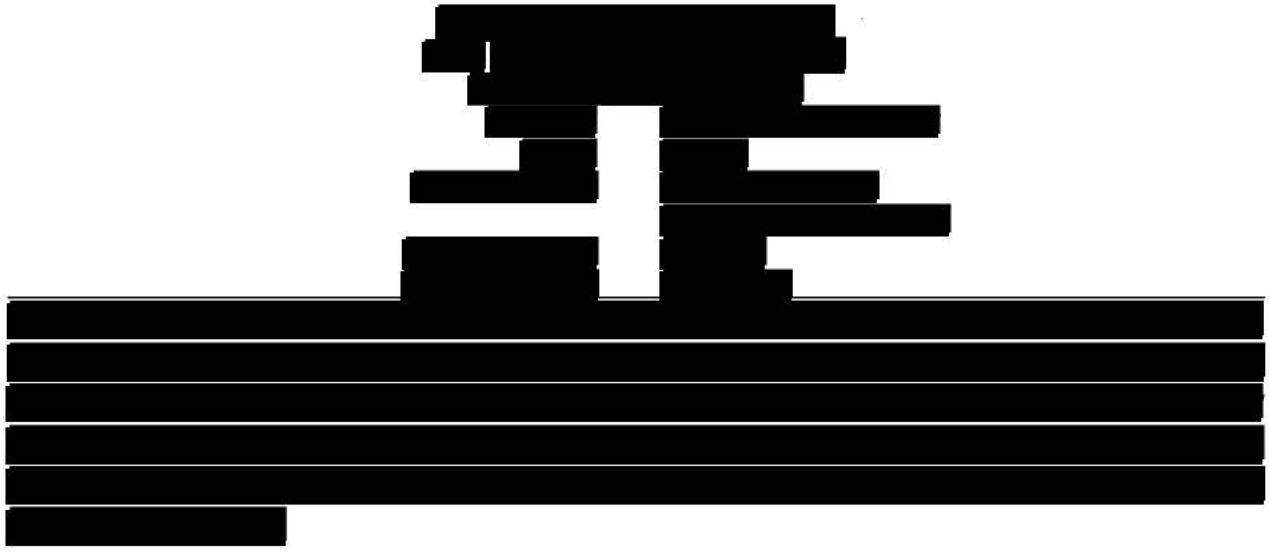


[redacted]



(b) (5)

[redacted]



[redacted]

(b) (5)

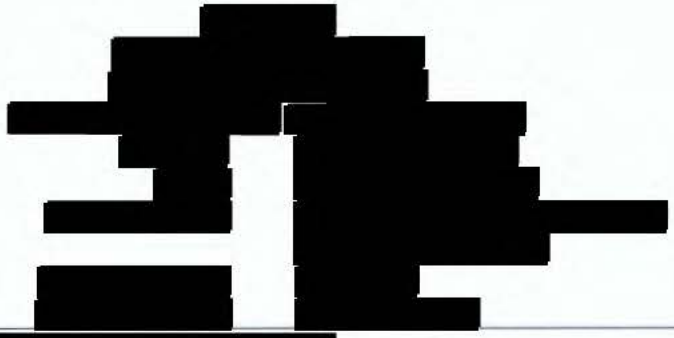
[redacted]

(b) (5)

[redacted]

(b) (5)

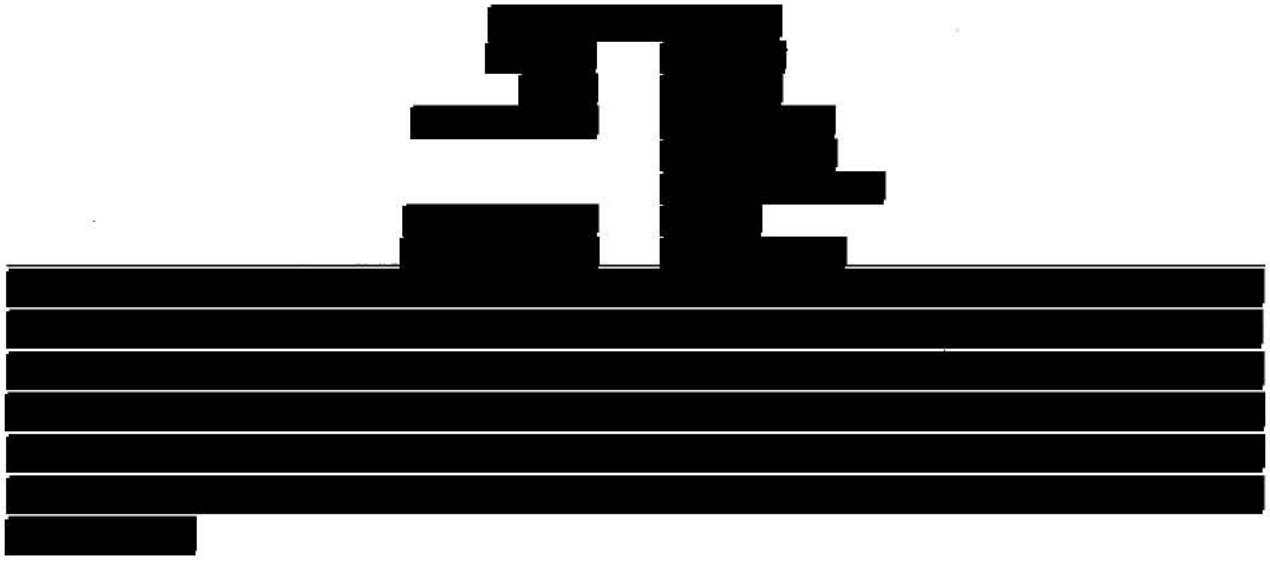
[redacted]



[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[redacted]

(b) (5)



(b) (5)

5.3.2 INDIVIDUAL PAST OWNERS AND OPERATORS

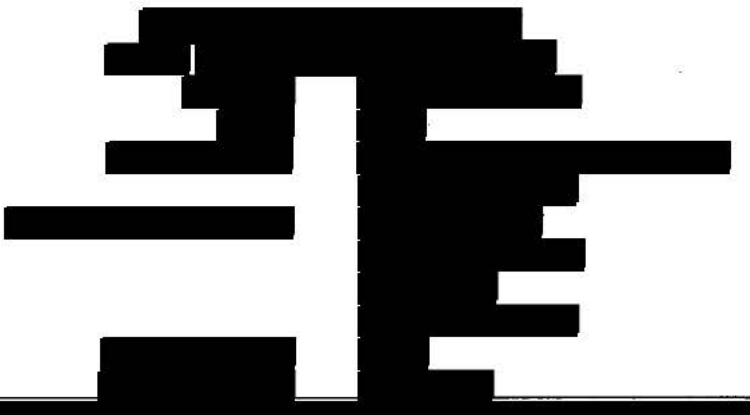
(b) (5)

Table 9: Private Individual Past Owners and Operators			
Name	Address	Comments	Source
(b) (5) [redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

5.4 GENERATORS

(b) (5)

[redacted]



[redacted]

(b) (5)

[redacted]

...

[redacted]

...

[redacted]

...

[redacted]

(b) (5)

[redacted]

...

[redacted]

...

[redacted]

(b) (5)

[redacted]

(b) (5)

(b) (5)

[redacted]

...

[redacted]

(b) (5)

[redacted]

...

[redacted]

(b) (5)

[redacted]

(b) (5)

[redacted]

5.5 TRANSPORTERS

(b) (5) [redacted]

5.6 ASSOCIATED PARTIES

(b) (5) [redacted]

6.0 CONCLUSION AND RECOMMENDATIONS

Conclusion

(b) (5)

Information Gaps/Recommendations

[redacted]

(b)(5)

[redacted]

(b)(5)

(b) (5)
[redacted]

Appendix A: Summary of Sources

Appendix A is a summary of the research performed under Amendment B to Task Order-035, which includes a list of sources contacted and resources utilized. During Toeroek's research for this task order, it conducted searches of various public and subscription online databases; federal, state and municipal government reports and files; library and museum collections; and Secretary of States' databases. Below is a list of the sources consulted in preparation of this report:

Colorado Department of Public Health and Environment | Water Quality Control Division

4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
http://www.state.co.us

February 2013
On February 4, 2013, Toeroek met Diana Huber, Search Specialist, at the CDPHE to collect and review information on the Mayflower Mill. Specifically, Toeroek examined state permit information and inspection reports on the Mayflower Mill. Materials reviewed included hydrological and hazardous waste reports, water and soil samples, photographs, and maps.

February 2013
On February 8, 2013, Toeroek also requested information regarding Mayflower Mill water discharge permits from the Water Quality Control Division (WQCD) at the CDPHE. The WQCD provided Toeroek with correspondence files, inspection reports, and maps of the Site, along with permit information regarding the Mayflower Mill's stormwater and discharge permits.

Colorado Division of Reclamation, Mining and Safety

1313 Sherman, Room 215
Denver, Colorado
http://mining.state.co.us/

January 2013
On January 29, 2013, the DRMS provided Toeroek with the complete mining and reclamation permit file for the Sunnyside Mine and Mayflower Mill Complex. The DVD provided contains over 1,000 documents relating to hydrological reports, correspondence, inspection reports, permit amendments, court records, and maps. All documents were discovered using multiple key word searches and data sorting.

Colorado School of Mines | Arthur Lakes Library

1400 Illinois Street
Golden, CO 80401
(303) 273-3911
http://library.mines.edu/

February 2013
Toeroek researched the holdings and digital archives of the Colorado School of Mines' Arthur Lakes Library. Information from the collections relevant to the Mayflower Mill was previously obtained by Toeroek.

Colorado State Archives

1313 Sherman, Room 1B20
Denver, CO 80203
(303) 866-2358
http://www.colorado.gov/dpa/doit/archives/

January 2013
Toeroek visited the Colorado State Archives on January 29, 2013. Toeroek reviewed Bureau of Mines reports for operational information regarding the Mayflower Mill; as well as reviewed corporate records for the Shenandoah-Dives Mining Company and Standard Metals Corporation. Toeroek was able to obtain the Site's complete annual production record from 1928 to 1981.

Denver Public Library | Western History and Genealogy Collection

Denver Public Library – Central Library
10 West Fourteenth Avenue Parkway
Denver, CO 80204
(720) 865-1821
http://history.denverlibrary.org/

January 2013
Toeroek visited the Denver Public Library to conduct research of its holdings for historical information on the Mayflower Mill, including the Western History and Genealogy Collection.

Erin J. Johnson Attorney at Law LLC

9 S. Glasgow Avenue
P.O. Box 189
Rico, Colorado

Toeroek contacted Ms. Erin Johnson, Attorney, to research chain-of-title from patent to present for the three patented Mayflower Mill Site claims; **"S" Mill Site, E.C.W. Mill Site**, and **H.M. Mill Site.** Ms. Johnson also assisted Toeroek with identifying current owners for the parcels of land comprising the Mayflower Mill Site tailings impoundment area.

History Colorado Center | Stephen H. Hart Library and Research Center

1200 Broadway
Denver, CO 80203
(303) 866-2305
http://www.historycolorado.org/researchers/stephen-h-hart-library-and-research-center

January 2013
Toeroek visited the Stephen H. Hart Library and Research Center at the History Colorado Center to research the library's collections and archives for information on the history of the Mayflower Mill. Toeroek also reviewed the library's collection of historic newspapers on microfilm.

San Juan County Assessor's Office

County Courthouse
1557 Greene St.
P.O. Box 596
Silverton, CO 81433
(970) 387-5632
http://www.sanjuancountycolorado.us/assessor.html

January, February and March 2013
Toeroek worked with the San Juan County Assessor's office to obtain GIS data for the site property and to verify current and past owners of site parcels.

San Juan County Clerk and Recorder's Office

County Courthouse
1557 Greene St.
P.O. Box 466
Silverton, CO 81433
(970) 387-5671

January, February and March 2013
Title documents were obtained from the San Juan County Clerk and Recorder's office.

USGS Library

Denver Federal Center
Denver, Colorado
http://library.usgs.gov/denlib.html

February and March 2013
Toeroek visited the USGS Library to collect operational information on the Mayflower Mill and corporate information for identified PRPS, utilizing the library's collection of Bureau of Mines Mineral Yearbooks, Engineering and Mining Journals, USGS publications and corporate annual reports.

Online Research

Toeroek conducted extensive online research for this project. The following resources were used:

- Colorado Historic Newspapers Collection at http://www.coloradohistoricnewspapers.org/
- Colorado Secretary of State website at http://www.sos.state.co.us/biz/BusinessEntityCriteriaExt.do
- General Internet Searches at www.google.com, http://books.google.com/, and https://sites.google.com/site/onlinenewspapersite/
- EPA Region 8 website http://www.epa.gov/aboutepa/region8.html
- Collection of the Fort Lewis College Center for Southwest Studies at http://swcenter.fortlewis.edu/finding_aids.shtml
- Library of Congress Prints and Photographs Online Catalog at http://www.loc.gov/pictures/
- Nexis News and Corporate database at http://w3.nexis.com/new/
- Northwest Digital Archives at http://nwda.orbiscascade.org/search/

- PACER Public Access to Court Electronic Records online database at http://www.pacer.gov/
- San Juan County Assessor's Office website at http://www.sanjuancountycolorado.us/assessor.html
- San Juan County Historical Society website at http://www.silvertonhistoricsociety.org/
- University of Colorado University Libraries Archives at http://ucblibraries.colorado.edu/archives/guides/manuscript2008.pdf
- University of Wisconsin Digital Collections, Ecology and Natural Resources Collection at http://uwdc.library.wisc.edu/collections/EcoNatRes
- United States Bureau of Land Management GLO Records database at http://www.glorecords.blm.gov/search/default.aspx
- United States Securities and Exchange Commission EDGAR database at http://www.sec.gov/edgar.shtml
- USGS EarthExplorer Map and Photo database at http://earthexplorer.usgs.gov/

Appendix B: Reference Document Index	
Bates No.	**Document Description**
AO	**Reference Documents for Prizm, Inc. 2009 PRP Search Report**
AO	A separate index for the AO series documents has been included with these documents. This index was prepared by Prizm, Inc. in June 2009.
BLM	**Bureau of Land Management**
BLM-001	*Standard Metals Acquisition Environmental Assessment*. U.S. Department of the Interior, Bureau of Land Management. 2010.
CBM	**Colorado Bureau of Mines**
CBM-1953	Scott, Jr., Walter E. 1954. *Annual Report for the Year 1953, Bureau of Mines, Museum Building, 14th Avenue and Sherman Street*, Denver 2, Colorado: Bradford-Robinson Ptg. Co.
CBM-1954	Scott, Jr., Walter E. 1955. *Annual Report for the Year 1954, Bureau of Mines, Museum Building, 14th Avenue and Sherman Street*, Denver 2, Colorado: Bradford-Robinson Ptg. Co.
CBM-1955	Scott, Jr., Walter E. 1956. *Annual Report for the Year 1955, Bureau of Mines, Museum Building, 14th Avenue and Sherman Street*, Denver 2, Colorado: Bradford-Robinson Ptg. Co.
CBM-1956	Scott, Jr., Walter E. 1957. *Annual Report for the Year 1956, Bureau of Mines, Museum Building, 14th Avenue and Sherman Street*, Denver 2, Colorado: Golden Bell Press.
CBM-1957	Scott, Jr., Walter E. 1958. *Annual Report for the Year 1957, Bureau of Mines, Museum Building, 14th Avenue and Sherman Street, Denver 2, Colorado*. Denver: The Golden Bell Press.
CBM-1958	Scott, Jr., Walter E. 1959. *Annual Report for the Year 1958, Bureau of Mines, Museum Building, 14th Avenue and Sherman Street, Denver 2, Colorado*. Denver: Allied Printing.
CBM-1959	Franz, Jr., G. A. 1960. *Annual Report for the Year 1959, Bureau of Mines, State Services Building, 1525 Sherman Street, Denver 3, Colorado*. Denver: Publishers Press.
CBM-1960	Franz, Jr., G. A. 1961. *Annual Report for the Year 1960, Bureau of Mines, State Services Building, 1525 Sherman Street, Denver 3, Colorado*. Denver: Publishers Press.
CDPHE	**Colorado Department of Public Health and Environment**
CDPHE-012	CDPHE, Stormwater Annual Report, Water Quality Control Division, Sunnyside Gold Corporation, Mayflower Mill, Inspection Report May 29, 2003.
CDPHE-019	CDPHE, Stormwater Annual Report, Water Quality Control Division, Sunnyside Gold Corporation, Mayflower Mill, Inspection Report June 6, 1996.
CDPHE-020	CDPHE, Stormwater Annual Report, Water Quality Control Division, Sunnyside Gold Corporation, Mayflower Mill, Inspection Report June 7, 1995.
CDPHE-023	CDPHE, Stormwater Management Plan, Permit Certification No. COR-040054 for San Juan County Historical Society, Mayflower Mill, June 26, 2001
CDPHE-024	Sunnyside Gold Corporation, Re: Stormwater Permit Certification No. COR-040054 Mayflower Mill to Water Quality Control Division, September 3, 1998.
CDPHE-025	Sunnyside Gold Corporation, Mine Remediation Plan Tailings Pond No. 4 Upland Groundwater Division, circa 1995.
CDPHE-026	Sunnyside Gold Corporation, Mine Remediation Plan Tailings Pond No. 4 Surface Drainage Modification, circa 1995.

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Bates No.	**Document Description**
CDPHE-027	Sunnyside Gold Corporation, Mayflower Facility – Upland Hydrological Control, circa 1995.
COSOS	**Colorado Secretary of State**
COSOS-001	Entity Detail and Corporate Filings for Standard Metals Corporation. Colorado Secretary of State website. Available at http://www.sos.state.co.us/.
COSOS-002	Entity Summary and Corporate Filings for Sunnyside Gold Corporation. Colorado Secretary of State website. Available at http://www.sos.state.co.us/.
COSOS-003	Entity Summary and Corporate Filings for Dillon Ranches, L.L.L.P. Colorado Secretary of State website. Available at http://www.sos.state.co.us/.
COSOS-004	Entity Summary and Corporate Filings for The Sidehill Mugwump Protection Society, Inc. Colorado Secretary of State website. Available at http://www.sos.state.co.us/.
COSOS-005	Entity Summary and Corporate Filings for Little Dog Enterprises, LLC. Colorado Secretary of State website. Available at http://www.sos.state.co.us/.
COSOS-006	Entity Summary and Corporate Filings for The San Juan County Historical Society. Colorado Secretary of State website. Available at http://www.sos.state.co.us/.
COSOS-007	Entity Summary and Corporate Filings for Cooney Properties 10, LLC. Colorado Secretary of State website. Available at http://www.sos.state.co.us/.
COSOS-008	Entity Summary and Corporate Filings for Washington Mining Company. Colorado Secretary of State. Available at http://www.sos.state.co.us/.
COSOS-009	Entity Summary and Corporate Filings for Utah Power & Light, Inc. Colorado Secretary of State. Available at http://www.sos.state.co.us/.
COSOS-010	Entity Summary and Corporate Filings for White Pine Gold Corporation. Colorado Secretary of State. Available at http://www.sos.state.co.us/.
COSOS-011	Entity Summary and Corporate Filings for Silverton Majestic, LLC. Colorado Secretary of State. Available at http://www.sos.state.co.us/.
CSA	**State of Colorado Archives**
CSA-001	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Group. July 9, 1928.
CSA-002	State of Colorado Bureau of Mines. Inspector's Report for Mayflower-Shenandoah-Dives Group. December 20, 1928.
CSA-003	State of Colorado Bureau of Mines. Inspector's Report for Mayflower-Shenandoah-Dives Mines. December 6, 1929.
CSA-004	State of Colorado Bureau of Mines. Inspector's Report for the Mayflower Mines Group. February 24, 1930.
CSA-005	State of Colorado Bureau of Mines. Inspector's Report for Mayflower-Shenandoah-Dives. May 28, 1929.
CSA-006	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine. August 15, 1930.
CSA-007	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine. May 26, 1931.
CSA-008	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives for Year 1930. February 20, 1931.

Appendix B: Reference Document Index	
Bates No.	**Document Description**
CSA-009	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives Mining Company for Year 1931. January 28, 1932.
CSA-010	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine. June 23, 1932.
CSA-011	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives Mine for the Year 1932. January 24, 1933.
CSA-012	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine. November 14, 1933.
CSA-013	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives Mine for the Year 1933. January 27, 1934.
CSA-014	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine. August 28-29, 1934.
CSA-015	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives Mining Company for the Year 1934. January 24, 1935.
CSA-016	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives. January 31, 1935.
CSA-017	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine. May 5, 1936.
CSA-018	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives. January 27, 1937.
CSA-019	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine. February 23, 1937.
CSA-020	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine. January 5, 1938.
CSA-021	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives for the Year 1937. February 15, 1938.
CSA-022	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine. January 6, 1939.
CSA-023	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives for the Year 1938. February 4, 1939.
CSA-024	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine. April 18, 1940.
CSA-025	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives for the Year 1939. February 4, 1939. January 31, 1940.
CSA-026	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine. February 14, 1941.
CSA-027	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives. February 21, 1941.
CSA-028	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine. September 18, 1942.
CSA-029	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine and Mill. March 27, 1943.

Appendix B: Reference Document Index	
Bates No.	**Document Description**
CSA-030	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives for the Year 1941. March 14, 1942.
CSA-031	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives for the Year 1946. February 25, 1947.
CSA-032	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives for the Year 1944. January 29, 1945.
CSA-033	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives for the Year 1943. February 18, 1944.
CSA-034	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives Mining Co. for the Year 1942. March 1, 1943.
CSA-035	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine and Mill. May 31, 1944.
CSA-036	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine and Mill. April 18, 1945.
CSA-037	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine and Mill. April 11, 1946.
CSA-038	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine and Mill. June 2, 1947.
CSA-039	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mine and Mill. June 19, 1948.
CSA-040	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mill. October 30, 1949.
CSA-041	State of Colorado Bureau of Mines. Report to Bureau of Mines for Shenandoah-Dives Mine and Mill for the Year 1948. February 23, 1949.
CSA-042	State of Colorado Bureau of Mines. Inspector's Report for Shenandoah-Dives Mill. February 8, 1950.
CSA-043	State of Colorado Bureau of Mines. Operator's Annual Report for the Year 1951 for the Shenandoah-Dives, Silver Lake and Iowa mines. February 20, 1952.
CSA-044	State of Colorado Bureau of Mines. Information Report for the Shenandoah Dives Mine. December 12, 1952.
CSA-045	State of Colorado Bureau of Mines. Inspector's Report for the Shenandoah Dives Mine (Mayflower). February 13, 1951.
CSA-046	State of Colorado Bureau of Mines. Operator's Annual Report for the Year 1952 for the Shenandoah-Dives Mine and (Silver Lake). February 3, 1953.
CSA-047	State of Colorado Bureau of Mines. Operator's Annual Report for the Year 1953 for the Shenandoah-Dives & Silver Lake. February 12, 1954.
CSA-048	State of Colorado Bureau of Mines. Operator's Annual Report for the Year 1952 for the Shenandoah-Dives Mill. February 3, 1953.
CSA-049	State of Colorado Bureau of Mines. Operator's Annual Report for the Year 1953 for the Shenandoah-Dives & Silver Lake. February 12, 1954.
CSA-050	State of Colorado Bureau of Mines. Information Report for the Shenandoah Dives (Mayflower Mine). January 16, 1954.

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Bates No.	**Document Description**
CSA-051	State of Colorado Bureau of Mines. Information Report for the Shenandoah Dives Mining Co. May 10, 1954.
CSA-052	State of Colorado Bureau of Mines. Operator's Annual Report for the Year 1954 for the Shenandoah-Dives Mining Co. February 10, 1955.
CSA-053	State of Colorado Bureau of Mines. Operator's Annual Report for the Year 1954 for the Shenandoah-Dives (Mayflower). November 9, 1955.
CSA-054	State of Colorado Bureau of Mines. Information Report for the Marcy Shenandoah Mill. October 14, 1958.
CSA-055	State of Colorado Bureau of Mines. Operator's Annual Report for the Year 1960 for the Standard Mill. February 8, 1961.
CSA-056	State of Colorado Bureau of Mines. Operator's Annual Report for the Year 1961 for the Shenandoah Mill. March 2, 1962.
CSA-057	State of Colorado Bureau of Mines. Information Report for the Shenandoah Mill. December 4, 1961.
CSA-058	State of Colorado Bureau of Mines. Information Report for the Shenandoah Mill. September 13, 1962.
CSA-059	State of Colorado Bureau of Mines. Operator's Annual Report for the Year 1962 for the Shenandoah Mill. January 22, 1963.
CSA-060	State of Colorado Bureau of Mines. Information Report for the Standard Mill. January 21, 1963.
CSA-061	State of Colorado Bureau of Mines. Operator's Annual Report for the Year 1963 for the Standard Mill. January 30, 1964.
CSA-062	State of Colorado Bureau of Mines. Information Report for the Standard Mill. November 9, 1964.
CSA-063	State of Colorado Bureau of Mines. Information Report for the Standard Mill. February 16, 1965.
CSA-064	State of Colorado Bureau of Mines. Information Report for the Standard Mill. January 4, 1965.
CSA-065	State of Colorado Bureau of Mines. Information Report for the Standard Mill. November 10, 1967.
CSA-066	State of Colorado Bureau of Mines. Information Report for the Standard Mill. October 17, 1968.
CSA-067	State of Colorado Bureau of Mines. Information Report for the Standard Mill. November 14, 1969.
CSA-068	State of Colorado Bureau of Mines. Information Report for the Standard Mill. November 14, 1970.
CSA-069	State of Colorado Bureau of Mines. Information Report for Standard Mill. November 24, 1971.
CSA-070	State of Colorado Bureau of Mines. Information Report for Standard Mill. November 21, 1972.
CSA-071	State of Colorado Bureau of Mines. Information Report for Standard Mill. March 26, 1973.

Appendix B: Reference Document Index	
Bates No.	**Document Description**
CSA-072	State of Colorado Bureau of Mines. Information Report for Standard Mill. October 25, 1973.
CSA-073	State of Colorado Division of Mines. Operator's Annual Report for Standard Mill for the Year 1973. February 20, 1974.
CSA-074	State of Colorado Division of Mines. Information Report for Standard Mill. November 29, 1974.
CSA-075	State of Colorado Division of Mines. Information Report for Standard Mill. December 15, 1975.
CSA-076	State of Colorado Division of Mines. Information Report for Standard Mill. October 8, 1976.
CSA-077	State of Colorado Division of Mines. Information Report for Standard Metals Mill. June 7, 1977.
CSA-078	State of Colorado Division of Mines. Operator's Annual Report for Standard Mill for the Year 1978. February 26, 1979.
CSA-079	State of Colorado Division of Mines. Operator's Annual Report for Standard Mill for the Year 1979. March 18, 1980.
CSA-080	State of Colorado Division of Mines. Information Report for Standard Mill. April 25, 1978.
CSA-081	State of Colorado Division of Mines. Information Report for Standard Mill. November 16, 1979.
CSA-082	State of Colorado Division of Mines. Operator's Annual Report for Standard Mill for the Year 1980. March 24, 1981.
CSA-083	State of Colorado Division of Mines. Information Report for Standard Mill. June 6, 1980.
DPL	**Denver Public Library**
DPL-001	Photo of "Shenandoah-Dives Mayflower Mill and Canyon Railroad and Animas Canyon," dated between 1934-1939. Available at http://digital.denverlibrary.org/cdm/singleitem/collection/p15330coll22/id/14739/rec/2
DPL-002	Photo of "Entering the mill," dated between 1934-1941. Available at http://digital.denverlibrary.org/cdm/singleitem/collection/p15330coll22/id/14729/rec/7
DPL-003	Photo of "Mill of the Shenandoah-Dives Syndicate at Silverton, Colo," dated 1929. Available at http://digital.denverlibrary.org/cdm/singleitem/collection/p15330coll22/id/38158/rec/18.
DRMS	**Colorado Division of Reclamation, Mining and Safety**
DRMS-003	Standard Metals Corporation, Letter to Colorado Mined Land Reclamation, RE: Standard Metals Corporation, Reclamation Plan Progress Report for June 1, 1977 – September 20, 1978. October 5, 1978.
DRMS-005	Standard Metals Corporation, Reclamation Plan – Silverton Operation, submitted to DRMS on July 10, 1985.
DRMS-006	Mined Land Reclamation Division, Letter to Standard Metals, RE: Sunnyside Mine and Mayflower Mill – File No. M-77-378, Notice of Violation and Cease and Desist Order No. M 85-073. October 25, 1985.

Appendix B: Reference Document Index	
Bates No.	**Document Description**
DRMS-007	Welborn, Dufford, Brown & Tooley, Attorneys at Law, Letter to DNR, Mined Land Reclamation Division, Re: Sunnyside Mine-Transfer of Ownership. November 20, 1985.
DRMS-009	Standard Metals Corporation, Letter to Mine Land Reclamation Division, RE: Notice of Compliance for Sunnyside Mine and Mayflower Mill File No. M-77-378, Notice of Violation and Cease and Desist Order No. M 85-073. November 8, 1985.
DRMS-010	Mined Land Reclamation Board, Findings of Fact for the Notice of Violation and Cease and Desist Order for Standard Metals Corporation, October 23, 1985
DRMS-011	Sunnyside Gold Corporation, Re: MLRB Annual Report for the Sunnyside Mine and Mill April 1987 to March 1988 to the Colorado Department of Natural Resources, May 25, 1988.
DRMS-012	Mined Land Reclamation Division, Re: Sunnyside Gold Corporation's "Sunnyside Mine," from Larry Perino, Sunnyside Gold Corporation to Mined Land Reclamation Division, August 24, 1988.
DRMS-015	Sunnyside Gold Corporation Reclamation Plan for Mining Permit # M-1977-378 to the Mined Land Reclamation Division, submitted August 11, 1995.
DRMS-016	District Court for the City and County of Denver, Colorado, [DRAFT] Consent Decree and Order, Sunnyside Gold Corporation v. Colorado Water Quality Control Division of the Colorado Department of Public Health and Environment, January 19, 1996.
DRMS-017	District Court for the City and County of Denver, Colorado, Joint Motion for Entry of Consent Decree and Order, Sunnyside Gold Corporation v. Colorado Water Quality Control Division of the Colorado Department of Public Health and Environment, May 6, 1996.
DRMS-018	Sunnyside Gold Corporation, Re: Temporary Cessation Status to Division of Minerals and Geology, August 13, 1996.
DRMS-020	Sunnyside Gold Corporation, MLR Annual Report from April 1998 to March 1999, submitted to Division of Minerals and Geology on June 10, 1999.
DRMS-021	Sunnyside Gold Corporation, MLR Annual Report from April 2010 to March 2011, submitted to Division of Minerals and Geology on June 3, 1999.
DRMS-022	Sunnyside Gold Corporation, MLR Annual Report from April 2011 to March 2012, submitted to Division of Minerals and Geology on June 5, 1999.
DRMS-023	San Juan County Mining Venture, Re: Sunnyside Mine Notice of Temporary Cessation of Mining Operations to the Mined Land Reclamation Division, submitted October 1, 1991.
DRMS-025	Standard Metals Corporation, Re: Seepage Control Plan for Tailings Pond No. 4 to Water Quality Control Division, submitted February 2, 1983.
DRMS-026	Standard Metals Corporation, Application for Mining and Reclamation Permit, Full Reclamation Plan for Silverton Operations, submitted to the Mined Land Reclamation Division on April 23, 1984.
DRMS-027	Standard Metals Corporation, Re: Seepage Control Plan for Tailings Pond No. 4 to Water Quality Control Division, submitted February 2, 1983.
DRMS-028	Colorado Department of Public Health, Re: Compliance Inspection of an Industrial Wastewater Treatment Facility Mayflower Mill to Larry Perino, Sunnyside Gold Corporation, October 28, 2003.

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Bates No.	**Document Description**
DRMS-029	Colorado Department of Public Health, Re: Standard Metals Corporation Mayflower Mill Seepage Control Plan, February 18, 1983.
DRMS-030	Standard Metals Corporation, Re: Tailings Pond No. 4 Seepage Control Plans to Water Quality Control Division, July 20, 1983.
DRMS-031	Mined Land Reclamation Division, Re: Standard Metals Seepage Control Program to Mark Loye, October, 20, 1983.
DRMS-033	Mined Land Reclamation Division, Re: Notice of Inspection and Inspection Report to Sunnyside Gold Corporation, Possible Problems, June 19, 1986.
DRMS-034	Mined Land Reclamation Division, Re: Sunnyside Gold Corporation's "Sunnyside Mine and Mayflower Mill," Permit and American Tunnel Sludge Disposal to Larry Perino, Sunnyside Gold Corporation, January 6, 1989.
DRMS-035	Colorado Department of Public Health and Environment, Re: Request for Final Inspection, Tailings Pond No. 4 Surface Drainage Modification Project for Consent Decree Order to Bruce Humphries, Sunnyside Gold Corporation, November 15, 1999.
DRMS-037	Sunnyside Gold Corporation, Re: Post Mining Land Use Modification TR-26 Submittal to Division of Minerals and Geology, April 28, 2003.
DRMS-038	DRMS, General Inspection of the Sunnyside Mine and Mayflower, inspection date July 22, 2011, dated January 19, 2012.
DRMS-039	DRMS, General Inspection of the Sunnyside Mine and Mayflower, inspection date July 22, 2011, dated January 19, 2012.
DUPL	**Durango Public Library**
DUPL-001	Marshall, John and Zeke Zaroni. *Mining the Hard Rock in the Silverton San Juans, 2nd Ed. 1998*, Library of Congress: 96-94414, 190-200. Silverton: Simpler Way Book Company.
EMJ	**Engineering and Mining Journal**
EMJ-001	Chase, Charles A. "A Geological Gamble in Colorado Meets with Success." *Engineering and Mining Journal*. August 10, 1929.
EMJ-002	"Shenandoah-Dives Meets Changed Conditions." *Engineering and Mining Journal*. March 1932.
EMJ-003	"Shenandoah-Dives Again Makes the Grade." *Engineering and Mining Journal*. March 1933.
EMJ-004	Henderson, Charles W. "Colorado: Storehouse of Varied Mineral Wealth." *Engineering and Mining Journal*. August 1935.
EMJ-005	Colorado Mining News. *Engineering and Mining Journal*. April 1959.
HAER	**Historical American Engineering Record**
HAER-001	Historical American Engineering Record. *HAER CO-91 Shenandoah-Dives Mill*. August 2005.
HAER-002	Historical American Engineering Record. Index to Photographs for HAER CO-91 Shenandoah-Dives Mill. August 2005. Available at http://lcweb2.loc.gov/pnp/habshaer/co/co0900/co0922/data/co0922cap.pdf.
HAER-003	Historical American Engineering Record. Photographs for HAER CO-91 Shenandoah-Dives Mill. Photograph CO-91-7. August 2005. Available at http://www.loc.gov/pictures/item/co0922.photos.365599p/.

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Bates No.	**Document Description**
HISOS	**Hawaii Secretary of State**
HISOS-001	Business Information for Pacific Silver Corporation. Hawaii Secretary of State. Available at http://hawaii.gov/dcca/breg.
INT	**General Internet Research**
INT-001	Consent Decree. *United States of America and the State of Colorado v. Standard Metals Corporation, Inc.* Civil Action No. 08-cv-02741-MSK-KMT. United States District Court for the District of Colorado. February 2, 2009. Available at http://docs.justia.com/cases/federal/district-courts/colorado/codce/1:2008cv02741/110715/5/.
INT-002	"About the Historical Society." San Juan County Historical Society website. Available at http://www.silvertonhistoricsociety.org/index_files/page0001.htm.
INT-003	http://www.nps.gov/nhl/designations/samples/co/mayflower.pdf
INT-004	Rich, Beverly. "The Mayflower Mill: Reclamation and Re-use." Cultural Resource Management, Vol. 21, No. 07. 1998. Available at http://crm.cr.nps.gov/archive/21-7/21-7-11.pdf.
INT-005	http://www.watchnewspapers.com/printer_friendly/19221920
INT-006	Search Results for "Tim A Edgar." White Pages website. Available at www.whitepages.com
INT-007	Search Results for "Timothy Edgar." ReferenceUSA website. Available at www.referenceusa.com.
INT-008	Search Results for "Pamela Killebrew." White Pages website. Available at www.whitepages.com.
INT-009	Search Results for "Michael Meuer." ReferenceUSA website. Available at www.referenceusa.com.
INT-010	Search Results for "Cherie Naffziger." ReferenceUSA website. Available at www.referenceusa.com.
INT-011	Government Printing Office. "Federal Reserve System: Change in Bank Control Notices; Acquisition of Shares of Bank of Bank Holding Companies." Available at www.gpo.gov
INT-012	Search Results for "Larry Zastrow." White Pages website. Available at www.whitepages.com.
INT-013	Wright, Samantha. "Red Mountain Mining Claims Revert to Public Domain." The *Watch Newspaper*. Available at http://www.watchnewspapers.com/view/full_story/19221920/article-Red-Mountain-mining-claims-revert-to-public-domain.
INT-014	"Mayflower Gold Mill." San Juan County Historical Society website. Available at http://www.silvertonhistoricsociety.org/index_files/page0013.htm.
INT-015	Search Results for "James Maccornack." White Pages website. Available at www.whitepages.com.
INT-016	Search Results for "Barbara Dobos." ReferenceUSA website. Available at www.referenceusa.com.
INT-017	Search Results for "Lyle Stone." ReferenceUSA website. Available at www.referenceusa.com.

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Bates No.	**Document Description**
INT-018	Search Results for "Brian Fullmer." White Pages website. Available at www.whitepages.com.
INT-019	Search Results for "Cheryl McMillan." ReferenceUSA website. Available at www.referenceusa.com.
INT-020	Search Results for "Leo Moir." White Pages website. Available at www.whitepages.com.
INT-021	Search Results for "Judith Moir." White Pages website. Available at www.whitepages.com.
INT-022	Search Results for "Michael Moir." White Pages website. Available at www.whitepages.com.
INT-023	Search Results for "Ronda Leath." White Pages website. Available at www.whitepages.com.
INT-024	"Company History." ASARCO website. Available at http://www.asarco.com/about-us/company-history/.
INT-025	"BLM Colorado Field Offices." Colorado Bureau of Land Management website. Available at www.blm.gov/co/st/en/fo.html.
INT-026	"Contact Us." San Miguel Power Association, Inc. corporate website. Available at http://www.smpa.com/contact.cfm.
INT-027	"County Administrator." San Juan County Colorado website. Available at www.sanjuancountycolorado.us/administrator.html.
INT-028	Search Results for "Winston Gresov." White Pages website. Available at www.whitepages.com.
MESOS	**Maine Secretary of State**
MESOS-001	Information Summary for Washington Mining Company. Maine Secretary of State. Available at https://icrs.informe.org/nei-sos-icrs/ICRS?MainPage=x.
MY	**Minerals Yearbook**
MY-1928	U.S. Bureau of Mines, *Mineral Resources of the United States – 1928*, U.S. Government Printing Office, Washington (1928).
MY-1929	U.S. Bureau of Mines, *Mineral Resources of the United States – 1929*, U.S. Government Printing Office, Washington (1929).
MY-1930	U.S. Bureau of Mines, *Mineral Resources of the United States – 1930*, U.S. Government Printing Office, Washington (1930).
MY-1931	U.S. Bureau of Mines, *Mineral Resources of the United States – 1931*, U.S. Government Printing Office, Washington (1931).
MY-1932	U.S. Bureau of Mines, *Minerals Yearbook for Year 1932-33,* U.S. Government Printing Office, Washington (1933).
MY-1934	U.S. Bureau of Mines, *Minerals Yearbook for Year 1934,* U.S. Government Printing Office, Washington (1934).
MY-1935	U.S. Bureau of Mines, *Minerals Yearbook for Year 1935,* U.S. Government Printing Office, Washington (1935).
MY-1936	U.S. Bureau of Mines, *Minerals Yearbook for Year 1936,* U.S. Government Printing Office, Washington (1936).

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Bates No.	**Document Description**
MY-1937	U.S. Bureau of Mines, *Minerals Yearbook for Year 1937,* U.S. Government Printing Office, Washington (1937).
MY-1938	U.S. Bureau of Mines, *Minerals Yearbook for Year 1938,* U.S. Government Printing Office, Washington (1938).
MY-1939	U.S. Bureau of Mines, *Minerals Yearbook for Year 1939,* U.S. Government Printing Office, Washington (1939).
MY-1940	U.S. Bureau of Mines, *Minerals Yearbook for Year 1940,* U.S. Government Printing Office, Washington (1940).
MY-1941	U.S. Bureau of Mines, *Minerals Yearbook for Year 1941,* U.S. Government Printing Office, Washington (1943).
MY-1942	U.S. Bureau of Mines, *Minerals Yearbook for Year 1942,* U.S. Government Printing Office, Washington (1943).
MY-1943	U.S. Bureau of Mines, *Minerals Yearbook for Year 1943,* U.S. Government Printing Office, Washington (1945).
MY-1944	U.S. Bureau of Mines, *Minerals Yearbook for Year 1944,* U.S. Government Printing Office, Washington (1945).
MY-1945	U.S. Bureau of Mines, *Minerals Yearbook for Year 1945,* U.S. Government Printing Office, Washington (1947).
MY-1946	U.S. Bureau of Mines, *Minerals Yearbook for Year 1946,* U.S. Government Printing Office, Washington (1948).
MY-1947	U.S. Bureau of Mines, *Minerals Yearbook for Year 1947,* U.S. Government Printing Office, Washington (1949).
MY-1948	U.S. Bureau of Mines, *Minerals Yearbook for Year 1948,* U.S. Government Printing Office, Washington (1950).
MY-1949	U.S. Bureau of Mines, *Minerals Yearbook for Year 1949,* U.S. Government Printing Office, Washington (1951).
MY-1950	U.S. Bureau of Mines, *Minerals Yearbook for Year 1950,* U.S. Government Printing Office, Washington (1953).
MY-1951	U.S. Bureau of Mines, *Minerals Yearbook for Year 1951,* U.S. Government Printing Office, Washington (1954).
MY-1952	U.S. Bureau of Mines, *Minerals Yearbook for Year 1952, Area Reports - Volume III,* U.S. Government Printing Office, Washington (1955).
MY-1953	U.S. Bureau of Mines, *Minerals Yearbook for Year 1953, Area Reports - Volume III,* U.S. Government Printing Office, Washington (1956).
MY-1955	U.S. Bureau of Mines, *Minerals Yearbook for Year 1955, Area Reports - Volume III,* U.S. Government Printing Office, Washington (1958).
MY-1956	U.S. Bureau of Mines, *Minerals Yearbook for Year 1956, Area Reports - Volume III,* U.S. Government Printing Office, Washington (1958).
MY-1957	U.S. Bureau of Mines, *Minerals Yearbook for Year 1957, Area Reports - Volume III,* U.S. Government Printing Office, Washington (1959).
MY-1958	U.S. Bureau of Mines, *Minerals Yearbook for Year 1958, Area Reports - Volume III,* U.S. Government Printing Office, Washington (1959).

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Bates No.	**Document Description**
MY-1959	U.S. Bureau of Mines, *Minerals Yearbook for Year 1959, Area Reports - Volume III,* U.S. Government Printing Office, Washington (1960).
MY-1960	U.S. Bureau of Mines, *Minerals Yearbook for Year 1960, Area Reports - Volume III,* U.S. Government Printing Office, Washington (1961).
MY-1961	U.S. Bureau of Mines, *Minerals Yearbook for Year 1961, Area Reports - Volume III,* U.S. Government Printing Office, Washington (1962).
MY-1962	U.S. Bureau of Mines, *Minerals Yearbook for Year 1962, Area Reports - Volume III,* U.S. Government Printing Office, Washington (1963).
MY-1963	U.S. Bureau of Mines, *Minerals Yearbook for Year 1963, Area Reports: Domestic - Volume III,* U.S. Government Printing Office, Washington (1964).
MY-1964	U.S. Bureau of Mines, *Minerals Yearbook for Year 1964, Area Reports: Domestic - Volume III,* U.S. Government Printing Office, Washington (1968).
MY-1971	U.S. Bureau of Mines, *Minerals Yearbook for Year 1971, Area Reports: Domestic - Volume II,* U.S. Government Printing Office, Washington (1973).
NEX	**NEXIS Database**
NEX-001	"Struggling Echo Bay Mines looks for financial reprieve." *The Edmonton Journal.* March 16, 2002. Available at http://www.nexis.com/.
NEX-002	"Mergers occur when dynamic is right: 'When it all comes together, you get a deal." *National Post.* March 29, 2002. Available at http://www.nexis.com/.
NEX-003	"Kinross Becomes the New Senior North American Gold Producer." *PR Newswire.* January 31, 2003. Available at http://www.nexis.com/.
NEX-004	"52W High: New 52-Wk High for STMC @ $0.080 up 166.67%." *Comtex News Network, Inc.* November 17, 2003. Available at http://www.nexis.com/.
NEX-005	"OTC Name and Symbol Change Eff. 11/22/2005." *Market News Publishing.* November 21, 2005. Available at http://www.nexis.com/.
NEX-006	"ASARCO tender successfully completed by Grupo Mexico." *AFX European Focus.* November 15, 2009. Available at http://www.nexis.com/.
NEX-007	"ASARCO pays $50 Million Maturity of Public Bonds; Seeks to Adjust Credit Terms in Discussions with Banks." *Business Wire.* December 3, 2001. Available at http://www.nexis.com/.
NEX-008	"ASARCO moves headquarters to Tucson." *The Arizona Daily Star.* April 13, 2005. Available at http://www.nexis.com/.
NEX-009	Hoover's Company Records-In depth Records: ASARCO LLC. March 27, 2012. Available at http://www.nexis.com/.
NEX-010	Hoover's Company Records-In depth Records: Grupo Mexico, S.A.B. de C.V. March 27, 2012. Available at http://www.nexis.com/.
NEX-011	"Alta Gold announces agreement with Washington Mining Co." *Business Wire.* December 8, 1988. Available at http://www.nexis.com/.
NEX-012	"Gold company files Chapter 11." *The Associated Press State & Local Wire.* April 16, 1999.
NEX-013	"Alta Gold Case Dismissed." *Public Company Bankruptcy Filing Information.* January 2, 2001. Available at http://www.nexis.com/.
PACER	**Public Access to Court Electronic Records**

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Bates No.	**Document Description**
PACER-001	Voluntary Petition for Case 05-21207, United States Bankruptcy Court, Southern District of Texas, Corpus Christi Div. Filed Aug. 9, 2005.
SDMS	**EPA Superfund Document Management System**
1020975	Letter from William B. Goodhard of Sunnyside Gold Corporation to J. David Holm of CDPHE. April 4, 1995.
1021566	*Mayflower Mill Historic Site – Business Plan Outline*. San Juan County Historical Society. Revised January 1996.
1021567	Letter from San Juan County Historical Society, Mill Committee to Janice Sheftel re: Mayflower Mill, basic plans for the cleanup and mill tour. March 6, 1996.
1021571	Agreement and Covenant Not to Sue. *In the Matter of: San Juan County Historical Society*. United States Environmental Protection Agency, Region VIII. Docket No. CERCLA VIII-96.
1060976	Consent Decree and Order. *Sunnyside Gold Corporation v. Colorado Water Quality Control Division of the Colorado Department of Public Health and Environment*. Case No. 94 CV 5459. District Court of the City and County of Denver, State of Colorado. Received May 1996.
1062227	"Mayflower Mill transfer approved." Press Release from San Juan County Historical Society. Dated June 11, 1996.
1136211	*Chapter VII_Metal Loading Process*. Draft dated September 19, 2000.
1185215	Consent Decree. *United States of America and the State of Colorado v. Standard Metals Corporation, Inc.* Civil Action No. 08-cv-02741-MSK-KMT. United States District Court for the District of Colorado. February 2, 2009.
SEC	**United States Securities and Exchange Commission**
SEC-001	SEC Form 10-K for Echo Bay Mines Ltd. for the fiscal year ended December 31, 1989.
SEC-002	*Order Instituting Administrative Proceedings Pursuant to Section 12(j) of the Securities Exchange Act of 1934, Making Findings, and Revoking Registration of Securities*. SEC Administrative Proceeding in the Matter of Standard Metals Corporation, File No. 3-13562. http://www.sec.gov/litigation/admin/2009/34-60369.pdf
SEC-003	SEC Form 15 for Standard Metals Corporation, dated March 9, 2009.
SEC-004	SEC Form 10-K for Echo Bay Mines Ltd. for the fiscal year ended December 31, 2002.
SEC-005	Letter from Winston G. Gresov, Vice-President and Acting CEO of Standard Metals to SEC Division of Corporation Finance re: Request to withdraw/delete Form 15-12B filing, dated June 2, 2009.
SEC-006	"Kinross and Echo Bay Announce Expiry of Echo Bay's Warrants." Press Release dated October 21, 2003.
SEC-007	SEC Form 6-K for Kinross Gold Corporation for the month of February 2013.
SEC-008	SEC Form 10-K/A for Echo Bay Mines Ltd. for the fiscal year ended December 31, 2000.
SEC-009	*deleted*
SEC-010	Plan of Arrangement in the Matter of the Arrangement among 4082389 Canada, Inc., TVX Gold Inc., and Echo Bay Mines Ltd.
SEC-011	SEC Form 10-K for Alta Gold Co. for the fiscal year ended December 31, 1995.
SEC-012	SEC Form 8-K for Alta Gold Co. dated March 7, 2000.

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Bates No.	**Document Description**
SEC-013	SEC Form 10-K for PacifiCorp for the fiscal year ended December 31, 2012.
SJCA	**San Juan County Assessor's Office**
SJCA-001	Property Card for Parcel No. 48290090010003.
SJCA-002	Property Card for Parcel No. 48290100010005.
SJCA-003	Property Card for Parcel No. 48290090010321.
SJCA-004	Property Card for Parcel No. 48290000010070.
SJCA-005	Property Card for Parcel No. 48290090010101.
SJCA-006	Property Card for Parcel No. 48290090010102.
SJCA-007	Property Card for Parcel No. 48290090010103.
SJCA-008	Property Card for Parcel No. 48290090010104.
SJCA-009	Property Card for Parcel No. 48290090010105.
SJCA-010	Property Card for Parcel No. 48290090010106.
SJCA-011	Property Card for Parcel No. 48290090010107.
SJCA-012	Property Card for Parcel No. 48290090010108.
SJCA-013	Property Card for Parcel No. 48290090010109.
SJCA-014	Property Card for Parcel No. 48290090010031.
SJCA-015	Property Card for Parcel No. 48290090010111.
SJCA-016	Property Card for Parcel No. 48290090010034.
SJCA-017	Property Card for Parcel No. 48290090010035.
SJCA-018	Property Card for Parcel No. 48290100010047.
SJCA-019	Property Card for Parcel No. 48290100010009.
SJCA-020	Property Card for Parcel No. 48290100010006.
SJCA-021	Property Card for Parcel No. 48290100010055.
SJCA-022	Property Card for Parcel No. 48290100010056.
SJCA-023	Property Card for Parcel No. 48290100010051.
SJCA-024	Property Card for Parcel No. 48290100010052.
SJCA-025	Property Card for Parcel No. 48290100010053.
SJCA-026	Property Card for Parcel No. 48290090010008.
SJCA-027	Property Card for Parcel No. 48290090010110.
SJCA-028	Property Card for Parcel No. 48290100010048.
SJCA-029	Property Card for Parcel No. 48290090010010.
USGS	**United States Geological Survey Library - Denver**
USGS-001	Standard Metals Corporation. *Annual Report for the year ended December 31, 1960.*
USGS-002	Standard Metals Corporation. *Annual Report for the year ended December 31, 1961.*
USGS-003	Standard Metals Corporation. *Annual Report for the year ended December 31, 1961.*
USGS-004	Standard Metals Corporation. *Annual Report for the year ended December 31, 1963.*
USGS-005	Standard Metals Corporation. *Annual Report 1964.*
USGS-006	Standard Metals Corporation. *Annual Report 1965.*
USGS-007	Standard Metals Corporation. *Annual Report 1966.*
USGS-008	Standard Metals Corporation. *Annual Report 1965* (with attachments).
USGS-009	Standard Metals Corporation. *Annual Report 1967.*

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Bates No.	**Document Description**
USGS-010	Standard Metals Corporation. *Annual Report 1969.*
USGS-011	Standard Metals Corporation. *Annual Report 1977.*
USGS-012	Standard Metals Corporation. *Annual Report 1982.*
USGS-013	Standard Metals Corporation. *Annual Report 1986.*
USGS-014	Shenandoah-Dives Mining Company. *Report of Operations of the Shenandoah-Dives Mining Company – Year 1932.*
USGS-015	Shenandoah-Dives Mining Company. *Report of Operations of the Shenandoah-Dives Mining Company – Year 1940.*
USGS-016	Shenandoah-Dives Mining Company. *Report of Operations of the Shenandoah-Dives Mining Company – Year 1941.*
USGS-017	Shenandoah-Dives Mining Company. *Report of Operations of the Shenandoah-Dives Mining Company – Year 1942.*
USGS-018	Shenandoah-Dives Mining Company. *Report of Operations of the Shenandoah-Dives Mining Company – Year 1943.*
USGS-019	Shenandoah-Dives Mining Company. *Report of Operations of the Shenandoah-Dives Mining Company – Year 1945.*
USGS-020	Shenandoah-Dives Mining Company. *Report of Operations of the Shenandoah-Dives Mining Company – Year 1946.*
USGS-021	Shenandoah-Dives Mining Company. *Report of Operations of the Shenandoah-Dives Mining Company – Year 1947.*
USGS-022	Shenandoah-Dives Mining Company. *Report of Operations of the Shenandoah-Dives Mining Company – Year 1948.*
USGS-023	Shenandoah-Dives Mining Company. *Report of Operations of the Shenandoah-Dives Mining Company – Year 1949.*
USGS-024	Shenandoah-Dives Mining Company. *Report of Operations of the Shenandoah-Dives Mining Company – Year 1950.*
USGS-025	Shenandoah-Dives Mining Company. *Report of Operations of the Shenandoah-Dives Mining Company – Year 1951.*
USGS-026	Echo Bay Mines Ltd. *Annual Report 1985.*
USGS-027	Echo Bay Mines Ltd. *Annual Report 1986.*
USGS-028	Echo Bay Mines Ltd. *Annual Report 1987.*
USGS-029	Echo Bay Mines Ltd. *Annual Report 1988.*
USGS-030	Echo Bay Mines Ltd. *Annual Report 1989.*
USGS-031	USGS. *Geological Survey Bulletin 1261 – Studies Related to Wilderness – Primitive Areas, 1967 – 1969: Mineral Resources of the Uncompahgre primitive areas, Colorado*. 1970. U.S. Government Printing Office.
USGS-032	Shenandoah-Dives Mining Company. *Report of Operations of the Shenandoah-Dives Mining Company – Year 1952.*
USGS-033	SEC Form 10-K for Alta Gold Co. for the transition period from April 1, 1989 to December 31, 1989.
USGS-034	SEC Form 10-K for Echo Bay Mines Ltd. for the fiscal year ended December 31, 1991.
USGS-035	SEC Form 10-K for Echo Bay Mines Ltd. for the fiscal year ended December 31, 1992.

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Bates No.	**Document Description**
USGS-036	SEC Form 10-K for Echo Bay Mines Ltd. for the fiscal year ended December 31, 1993.
USGS-037	SEC Form 10-K for Echo Bay Mines Ltd. for the fiscal year ended December 31, 1994.
USGS-038	SEC Form 10-K for Echo Bay Mines Ltd. for the fiscal year ended December 31, 1995.
USGS-039	SEC Form 10-K for Echo Bay Mines Ltd. for the fiscal year ended December 31, 1996.
USGS-040	SEC Form 10-K for Echo Bay Mines Ltd. for the fiscal year ended December 31, 1997.
USGS-041	SEC Form 10-K for Echo Bay Mines Ltd. for the fiscal year ended December 31, 1995.
USGS-042	SEC Form 10-K for Echo Bay Mines Ltd. for the fiscal year ended December 31, 1989.
USGS-043	*The Mines Handbook, Vol. XVIII* (1931 Issue). 1931. Mines Information Bureau, Incorporated.
USGS-044	*The Mines Register, Volume XIX*. 1937. Mines Publications, Inc.
USGS-045	*Mines Register, Vol. XX*. 1940. Atlas Publishing Company.
USGS-046	*Mines Register, Vol. XXI*. 1942. Atlas Publishing Company.
USGS-047	*Mines Register, Vol. XXII*. 1946. Bardeen Press, Inc. – Atlas Publishing Co.
USGS-048	*Mines Register, Vol. XXIII*. 1949. Bardeen Press, Inc. – Atlas Publishing Co.
USGS-049	*Mines Register, Vol. XXIV*. 1952. Atlas Publishing Co.
USGS-050	*Mines Register, Vol. XXV*. 1956. Bardeen Press, Inc.
USGS-051	Douglas B. Yager and Dana J. Bove. *Geologic Framework*. Chapter E1 of *Integrated Investigations of Environmental Effects of Historical Mining in the Animas River Watershed, San Juan County, Colorado*. Professional Paper 1651. 2007. U.S. Department of the Interior, U.S. Geological Survey.
USGS-052	J. Thomas Nash and David L. Fey. *Mine Adits, Mine-Waste Dumps, and Mill Tailings as Sources of Contamination*. Chapter E6 of *Integrated Investigations of Environmental Effects of Historical Mining in the Animas River Watershed, San Juan County, Colorado*. Professional Paper 1651. 2007. U.S. Department of the Interior, U.S. Geological Survey.
USGS-053	Nash, J. Thomas. *Geochemical Investigations and Interim Recommendations for Priority Abandoned Mine Sites, BLM Lands, Upper Animas River Watershed, San Juan County, Colorado*; paper edition. Open-File Report 99-323. U.S. Department of the Interior, U.S. Geological Survey. 1999.
USGS-054	Jones, William R. *History of Mining and Milling Practices in San Juan County, Colorado, 1871 – 1991*. Chapter C of *Integrated Investigations of Environmental Effects of Historical Mining in the Animas River Watershed, San Juan County, Colorado*. Professional Paper 1651. 2007. U.S. Department of the Interior, U.S. Geological Survey. Available at http://pubs.usgs.gov/pp/1651/downloads/Vol1_combinedChapters/vol1_chapC.pdf

Table 1: Title Abstract, from Patent to Present, for the "S" Mill Site, E.C.W. Mill Site and H.M. Mill Site									
Grantor	**Grantee**	**Recorded Date**	**Document Date**	**Type**	**Book / Page**	**Reception #**	**Description**	**Site Claims**	**Source**
United States	Shenandoah-Dives Mining Co		8/14/1931	Patent #1048978			Patent for "S" Mill Site	S Mill Site	TITLE-001
United States	Shenandoah-Dives Mining Co.		3/7/1946	Patent #1120728			Patent includes: ECW Mill Site; HM Mill Site; NN Mill Site; MB Mill Site; Tracts A and B of the THW Mill Site; MS 205895	ECW Mill Site HM Mill Site	TITLE-002
Shenandoah-Dives Mining Co.	Marcy Exploration and Mining Company, Inc.	1/12/1959	7/11/1957	Merger	185/186	99722	Merger of Shenandoah-Dives and Marcy Exploration and Mining Co., Inc. (survivor). Surviving corporate name is "Marcy-Shenandoah Corporation"	S Mill Site ECW Mill Site HM Mill Site	TITLE-003
Shenandoah-Dives Mining Co.	Marcy-Shenandoah Corporation	2/27/1959	9/3/1957	Quit Claim	185/204	99776	ECW Mill Site, HM Mill Site, "S" Mill Site; included Mayflower Mill Tailings area claims.	S Mill Site ECW Mill Site HM Mill Site	TITLE-004
Marcy-Shenandoah Corporation	Standard Uranium Corporation	3/17/1959	2/28/1959	Quit Claim	179/143	99797	Undivided 1/2 interest: ECW Mill Site, HM Mill Site, "S" Mill Site; included Mayflower Mill Tailings area claims.	S Mill Site ECW Mill Site HM Mill Site	TITLE-006
Marcy-Shenandoah Corporation & Standard Uranium Corporation	Shenandoah, Ltd. (Partnership between Marcy-Shenandoah Corporation and Standard Uranium Corporation)	3/17/1959	2/28/1959	Quit Claim	179/144	99801	ECW Mill Site, HM Mill Site, "S" Mill Site; included Mayflower Mill Tailings area claims.	S Mill Site ECW Mill Site HM Mill Site	TITLE-007
Marcy-Shenandoah Corporation and Standard Uranium Corp	Shenandoah, Ltd.	1/28/1960	1/18/1960	Certificate of Cancellation for Shenandoah, Ltd.	185/319	100510	Cancellation of the limited partnership between Marcy-Shenandoah Corporation and Standard Uranium Corporation, which was formed by agreement on February 28, 1959.	S Mill Site ECW Mill Site HM Mill Site	TITLE-008
Information Gap									
Canadian Imperial Bank of Commerce	Standard Metals Corporation	12/9/1985	11/19/1985	Release and Termination of Mortgage	230/727	130066	Release of mortgage dated 11/30/1981, rec 12/4/1981, B222 P587 as amended on 2/23/1983; and mortgage dated 4/30/1984, rec 5/4/1984, B226 P439	S Mill Site ECW Mill Site HM Mill Site	TITLE-014
Standard Metals Corporation and Echo Bay, Inc.	Sunnyside Gold Corporation	12/9/1985	11/19/1985	General Transfer, Assignment and Bill of Sale	230/733	130068	Claims in Marcy-Shenandoah lease (see pg. 762): ECW Mill Site, HM Mill Site, "S" Mill Site; included Mayflower Mill Tailings area claims.	S Mill Site ECW Mill Site HM Mill Site	TITLE-015
Echo Bay, Inc.	Sunnyside Gold Corporation	12/9/1985	11/19/1985	Assignment	230/730	130067	Assignment of asset sale and purchase agreement of 11/19/1985 between Echo Bay, Inc. and Standard Metals Corp.	S Mill Site ECW Mill Site HM Mill Site	TITLE-016
Sunnyside Gold Corporation	**San Juan County Historical Society (Current Owner)**	8/14/1996	5/29/1996	Quit Claim	242/784	138250	ECW Mill Site, HM Mill Site, "S" Mill Site; included Mayflower Mill Tailings area claims.	S Mill Site ECW Mill Site HM Mill Site	TITLE-023
Sunnyside Gold Corp	San Juan County Historical Society	8/14/1996	5/29/1996	Easement	243/916	138252	Temporary access easement through portion of HM Mill Site.	HM Mill Site	TITLE-021
San Juan County Historical Society	Sunnyside Gold Corp	9/18/1998	9/8/1998	Access Agreement	246/691	139511	Easement through portion of ECW Mill Site and "S" for hydrologic studies.	S Mill Site ECW Mill Site	TITLE-026
San Juan County Historical Society	Sunnyside Gold Corp	1/19/1999	1/14/1999	Access Agreement	247/35	139734	Easement through portion of ECW Mill Site and "S" for hydrologic studies.	S Mill Site ECW Mill Site	TITLE-028

Appendix C
TO-035 Mayflower Mill Site

Table 1: Title Abstract, from Patent to Present, for the "S" Mill Site, E.C.W. Mill Site and H.M. Mill Site									
Grantor	**Grantee**	**Recorded Date**	**Document Date**	**Type**	**Book / Page**	**Reception #**	**Description**	**Site Claims**	**Source**
San Juan County Historical Society	San Juan County	10/16/2006	10/11/2006	Easement		145275	Easement to county for future RR ROW and recreational trail on Powerhouse PUD		TITLE-048
San Juan County Historical Society	San Juan County	10/16/2006	10/11/2006	Easement/Open Space Dedication		145276			TITLE-049
San Juan County Historical Society	Sunnyside Gold Corp	1/7/2007	11/17/2006	Termination of Lease		145474	Termination of 243/919		TITLE-050

Table 2: Current Owners of the Tailings Impoundment Area								
Claim Name	**S.N. #**	**Parcel #**	**Previous Owner**	**Vesting Date**	**Current Owner**	**Reception**	**Vesting Conveyance**	**SJCA Source**
Ann Harris Placer	11596	48290090010003	Standard Metals Corporation	11/1/1985	Sunnyside Gold Corporation	130068	TITLE-015	SJCA-001
Aurora	18434	48290100010053	Stone, MacCornack and Dobos	12/23/1998	San Juan County Historical Society	139730	TITLE-027	SJCA-025
Bend Placer	11596	48290090010031	Sunnyside Gold Corporation	7/5/2001	Perino, Larry R.	141266	TITLE-033	SJCA-014
Blair Placer	841	48290090010003	Standard Metals Corporation	11/1/1985	Sunnyside Gold Corporation	130068	TITLE-015	SJCA-001
Blair Placer	841	48290090010003	Sunnyside Gold Corporation	10/20/1999	San Miguel Power Association	140208	TITLE-029	SJCA-001
Blair Placer (portion)	841	48290090010321	Sunnyside Gold Corporation	5/29/1996	San Juan County	138250	TITLE-023	SJCA-003
Buena Vista	14012	48290100010006	Standard Metals Corporation	11/1/1985	Sunnyside Gold Corporation	130068	TITLE-015	SJCA-020
C.H. Mill Site	20594 B	48290090010031	Sunnyside Gold Corporation	7/5/2001	Perino, Larry R.	141266	TITLE-033	SJCA-014
Tract A, Esther Allen	8801 A	48290090010034	ASARCO Inc.	1/30/2004	Dan Dugi Defined Benefit Trust Plan	143245	TITLE-034	SJCA-016
Genoa, Lot 1	14024	48290100010055	ASARCO Inc.	3/4/2004	Zastrow, Larry	143299	TITLE-038	SJCA-021
Genoa, Lot 1	14024	48290100010056	ASARCO Inc.	3/4/2004	Zastrow, Larry	143299	TITLE-038	SJCA-022
Gold	14012	48290090010003	Standard Metals Corporation	11/1/1985	Sunnyside Gold Corporation	130068	TITLE-015	SJCA-001
Jeannette Roux Placer	11596	48290090010003	Standard Metals Corporation	11/1/1985	Sunnyside Gold Corporation	130068	TITLE-015	SJCA-001
Jeannette Roux Placer (Surface Rights Only)	11596	48290000010070	*No transfer information listed*		Utah Power & Light Co.		n/a	SJCA-004
Jeannette Roux Placer, Lot 1 [Powerhouse PUD]	11596	48290090010101	San Juan County Historical Society	12/13/2007	Dillon Ranches LLLP	146179	TITLE-064	SJCA-005
Jeannette Roux Placer, Lot 2 [Powerhouse PUD]	11596	48290090010102	Sunnyside Gold Corporation	5/29/1996	San Juan County Historical Society	130068	TITLE-015	SJCA-006
Jeannette Roux Placer, Lot 3 [Powerhouse PUD]	11596	48290090010103	San Juan County Historical Society	8/17/2007	Michael K Meuer	145910	TITLE-061	SJCA-007
Jeannette Roux Placer, Lot 4 [Powerhouse PUD]	11596	48290090010104	Cooney Properties 10 LLC	10/27/2007	Sidehill Mugwump Protection Society	n/a	n/a	SJCA-008
Jeannette Roux Placer, Lot 5 [Powerhouse PUD]	11596	48290090010105	San Juan County Historical Society	6/1/2007	Little Dog Enterprises, LLC	145736	TITLE-059	SJCA-009
Jeannette Roux Placer, Lot 6 [Powerhouse PUD]	11596	48290090010106	Brian Fullmer [foreclosure]	6/19/2012	San Juan County Historical Society	148518	TITLE-068	SJCA-010
Jeannette Roux Placer, Lot 7 [Powerhouse PUD]	11596	48290090010107	Sunnyside Gold Corporation	11/1/1985	San Juan County Historical Society	130068	TITLE-015	SJCA-011
Jeannette Roux Placer, Lot 8 [Powerhouse PUD]	11596	48290090010108	Sunnyside Gold Corporation	11/1/1985	San Juan County Historical Society	130068	TITLE-015	SJCA-012
Jeannette Roux Placer, Lot 9 [Powerhouse PUD]	11596	48290090010109	Sunnyside Gold Corporation	11/1/1985	San Juan County Historical Society	130068	TITLE-015	SJCA-013
Lowville Mill Site	5529 B	48290100010048	Cheryl McMillan and Silverton Majestic LLC (aka Silverton Majesty)	5/26/2004	Watts Rev Declaration of Trust	143447	TITLE-041	SJCA-028
M.B. Mill Site	20595B	48290100010006	Standard Metals Corporation	11/1/1985	Sunnyside Gold Corporation	130068	TITLE-015	SJCA-020
M.D. Thatcher Placer	17699	48290090010031	Sunnyside Gold Corporation	7/5/2001	Perino, Larry R.	141266	TITLE-033	SJCA-014
Marcia L.	8801 A	48290100010047	Robinette-Leath, Rhonda	10/28/2005	Naffziger, Ryan and Cherie	144558	TITLE-045	SJCA-018
N.N. Mill Site	20595B	48290100010006	Standard Metals Corporation	11/1/1985	Sunnyside Gold Corporation	130068	TITLE-015	SJCA-020
H.V.B. Mill Site	20594B	48290090010003	Standard Metals Corporation	11/1/1985	Sunnyside Gold Corporation	130068	TITLE-015	SJCA-001
Peter Placer	11596	48290090010031	Sunnyside Gold Corporation	7/5/2001	Perino, Larry R.	141266	TITLE-033	SJCA-014
Polar Star Mill Site	7608	48290090010031	Sunnyside Gold Corporation	7/5/2001	Perino, Larry R.	141266	TITLE-033	SJCA-014
River	15112	48290090010035	ASARCO Inc.	1/30/2004	Dan Dugi Defined Benefit Trust Plan	143246	TITLE-035	SJCA-017
Riverside	8801	48290090010003	Standard Metals Corporation	11/1/1985	Sunnyside Gold Corporation	130068	TITLE-015	SJCA-001
Riverside (Part of)	8801	48290090010008	Colo State Bank and Trust as custodian fbo Phil W. May Self-Directed IRA	11/22/2004	William E. Ogle	143865	TITLE-043	SJCA-026
Riverside (Part of)	8801	48290090010008	San Juan County Historical Society	12/2/2004	William E. Ogle	143874	TITLE-044	SJCA-026
Southside	14012	48290100010009	Leo and Judith Moir	10/28/1993	Edgar, Tim A. and Pam Killebrew	136481	TITLE-019	SJCA-019
Tract A of Jeanette Roux Placer	8801 A	48290090010110	Sunnyside Gold Corporation	11/27/2000	San Juan County Historical Society	140893	TITLE-032	SJCA-027
Tract A, T.H.W. Mill Site	20595B	48290100010006	Standard Metals Corporation	11/1/1985	Sunnyside Gold Corporation	130068	TITLE-015	SJCA-020
Tract B, T.H.W. Mill Site	20595B	48290100010006	Standard Metals Corporation	11/1/1985	Sunnyside Gold Corporation	130068	TITLE-015	SJCA-020
Tract B, Esther Allen	8801 A	48290090010111	Sunnyside Gold Corporation	11/27/2000	San Juan County Historical Society	140893	TITLE-032	SJCA-015
U.S. C23981	-	-	-	-	Exempt Parcel	-	-	-
Valley Forge	653	48290100010053	Stone, MacCornack and Dobos	12/23/1998	San Juan County Historical Society	139730	TITLE-027	SJCA-025
Valley Forge Extension	18434	48290100010053	Stone, MacCornack and Dobos	12/23/1998	San Juan County Historical Society	139730	TITLE-027	SJCA-025

TARGET SHEET

EPA REGION VIII

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DOCUMENT DESCRIPTION:

1 CD - Mayflower Mill Draft PRP Search Report, March 22, 2013 (236MB)
1 CD - Documents from 104(e) Responses Relevant to Mayflower Mill Tailings and Remediation, May 27, 2014 (697MB)

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